

MSY-GE COOLING ONLY WALL-MOUNT AIR SYSTEMS

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1. INDOOR UNITS

- MSY-GE09NA-8
- MSY-GE12NA-8
- MSY-GE15NA-8
- MSY-GE18NA-8
- MSY-GE24NA

Due to continuing improvement, above specification may be subject to change without notice.

2. OUTDOOR UNITS

- MUY-GE09NA
- MUY-GE12NA
- MUY-GE15NA-1
- MUY-GE18NA-1
- MUY-GE24NA

Due to continuing improvement, above specification may be subject to change without notice.

3-1. SPECIFICATIONS

- Wall-mounted indoor unit
- Standard Hybrid Catechin Prefilter is included with indoor unit
- Quiet operation
- Auto fan speed control: Quiet, Low, Medium, High, and Super High
- Hand-held Wireless Remote Controller
- Indoor unit powered from outdoor unit using A-Control
- Auto restart following a power outage
- Anti-allergy Enzyme Filter
- Limited warranty: five years parts and seven years compressor

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3-1. SPECIFICATIONS

MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8

Model name			MSY-GE09NA-8	MSY-GE12NA-8
Power supply	V, phase, Hz		208/230, 1, 60	
Max. fuse size (time delay)/ Disconnect switch	A		15	
Min. circuit ampacity	A		1.0	
Blower Motor (ECM)	F.L.A		0.76	
Airflow Super High - High - Med. - Low - Quiet	COOL Dry (Wet)	CFM	399-321-237-170-145 (364-286-201-134-109)	
Moisture removal	pt./h		1.5	2.5
Sensible Heat Factor			0.82	0.74
Sound level Super High - High - Med. - Low - Quiet	Cooling	dB(A)	43-37-30-22-19	45-37-30-22-19
Cond. drain connection O.D.	in.		5/8	
Dimensions	W	in.	31-7/16	
	D		9-1/8	
	H		11-5/8	
Weight	lb.		22	
External finish			Munsell 1.0Y 9.2/0.2	
Control voltage (by built-in transformer)			12 - 24 VDC	

Model name			MSY-GE15NA-8	MSY-GE18NA-8
Power supply	V, phase, Hz		208/230, 1, 60	
Max. fuse size (time delay)/ Disconnect switch	A		15	
Min. circuit ampacity	A		1.0	
Blower Motor (ECM)	F.L.A		0.76	
Airflow Super High - High - Med. - Low - Quiet	COOL Dry (Wet)	CFM	533-420-335-272-205 (498-385-300-237-170)	533-420-339-275-230 (498-385-304-240-194)
Moisture removal	pt./h		2.7	4.6
Sensible Heat Factor			0.80	0.71
Sound level Super High - High - Med. - Low - Quiet	Cooling	dB(A)	49-44-38-32-26	49-44-38-33-28
Cond. drain connection O.D.	in.		5/8	
Dimensions	W	in.	31-7/16	
	D		9-1/8	
	H		11-5/8	
Weight	lb.		22	
External finish			Munsell 1.0Y 9.2/0.2	
Control voltage (by built-in transformer)			12 - 24 VDC	

NOTE: Test conditions are based on ARI 210/240.

- *1: Rating conditions (Cooling) — Indoor: 80°FDB, 67°FWB, Outdoor: 95°FDB, (75°FWB) Rated frequency
(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 47°FDB, 43°FWB Rated frequency
*2: (Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 17°FDB, 15°FWB Maximum frequency

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3-1. SPECIFICATIONS

MSY-GE24NA

Model name			MSY-GE24NA
Power supply	V, phase, Hz		208/230, 1, 60
Max. fuse size (time delay)/ Disconnect switch	A		20
Min. circuit ampacity	A		1.0
Blower Motor (ECM)	F.L.A		0.76
Airflow Super High - High - Med. - Low - Quiet	COOL Dry (Wet)	CFM	738-628-469-388 (661-562-420-347)
Moisture removal	pt./h		5.1
Sensible Heat Factor			0.75
Sound level Super High - High - Med. - Low - Quiet	Cooling	dB(A)	53-49-41-34
Cond. drain connection O.D.	in.		5/8
Dimensions	W	in.	43-5/16
	D		9-3/8
	H		12-13/16
Weight	lb.		22
External finish			Munsell 1.0Y 9.2/0.2
Control voltage (by built-in transformer)			12 - 24 VDC

NOTE: Test conditions are based on ARI 210/240.

*1: Rating conditions (Cooling) — Indoor: 80°FDB, 67°FWB, Outdoor: 95°FDB, (75°FWB)	Rated frequency
(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 47°FDB, 43°FWB	Rated frequency
*2: (Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 17°FDB, 15°FWB	Maximum frequency

Due to continuing improvement, above specification may be subject to change without notice.

MUY-GE09NA MUY-GE12NA

*1:	Rating conditions (Cooling) — Indoor: 80°FDB, 67°FWB, Outdoor: 95°FDB, (75°FWB)	Rated frequency
	(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 47°FDB, 43°FWB	Rated frequency
*2:	(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 17°FDB, 15°FWB	Maximum frequency

MSY-GE-7

3-1. SPECIFICATIONS

MUY-GE15NA-1 MUY-GE18NA-1

Model name			MUY-GE15NA-1	MUY-GE18NA-1
Capacity Rated (Minimum~Maximum)	Cooling ※1	Btu/h	14,000 (3,100 ~ 18,200)	17,200 (3,700 ~ 18,700)
Power consumption Rated (Minimum~Maximum)	Cooling ※1	W	1,080 (160~2,000)	1,640 (240~2,070)
EER ※1 [SEER] ※3	Cooling		13.0 [21.0]	10.5 [19.2]
Power supply	V , phase , Hz		208/230 , 1 , 60	
Max. fuse size (time delay)		A	15	
Min. circuit ampacity		A	12	14
Fan Motor (ECM)		F.L.A	0.50	0.93
Compressor	Model		SNB130FQBHT	
	R.L.A		6.8	10.0
	L.R.A		8.5	12.5
	Refrigeration oil cc. (Model)		450 (NEO22)	
Refrigerant control			Linear expansion valve	
Sound level ※1	Cooling	dB(A)	49	54
Defrost method			Reverse Cycle	
Dimensions	W	in.	31-1/2	33-1/16
	D	in.	11-1/4	13
	H	in.	21-5/8	33-7/16
Weight		lb.	80	119
External finish			Munsell 3Y 7.8/1.1	
Remote controller			Wireless type	
Control voltage (by built-in transformer)		VDC	12 - 24	
Refrigerant piping			Not supplied	
Refrigerant pipe size (Min. wall thickness)	Liquid	in.	1/4 (0.0315)	
	Gas	in.	3/8 (0.0315)	
Connection method	Indoor		Flared	
	Outdoor		Flared	
Between the indoor & out- door units	Height difference	ft.	40	50
	Piping length	ft.	65	100
Refrigerant charge (R410A)			2 lb. 9 oz.	3 lb. 7 oz.

NOTE: Test conditions are based on ARI 210/240.

※1: Rating conditions (Cooling) — Indoor: 80°FDB, 67°FWB, Outdoor: 95°FDB, (75°FWB) Rated frequency
(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 47°FDB, 43°FWB Rated frequency
※2: (Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 17°FDB, 15°FWB Maximum frequency

Due to continuing improvement, above specification may be subject to change without notice.

3-1. SPECIFICATIONS

MUY-GE24NA

Model name			MUY-GE24NA
Capacity Rated (Minimum~Maximum)	Cooling ※1	Btu/h	22,500 (8,200 ~ 31,400)
Power consumption Rated (Minimum~Maximum)	Cooling ※1	W	1,800 (570 ~ 3,580)
EER ※1 [SEER] ※3	Cooling		12.5 [19.0]
Power supply	V , phase , Hz		208/230 , 1 , 60
Max. fuse size (time delay)		A	20
Min. circuit ampacity		A	17.1
Fan Motor (ECM)		F.L.A	0.93
Compressor	Model		SNB172FQKMT
		R.L.A	12.9
		L.R.A	16.1
	Refrigeration oil cc. (Model)		0.40 (FV50S)
Refrigerant control			Linear expansion valve
Sound level ※1	Cooling	dB(A)	55
Defrost method			Reverse Cycle
Dimensions	W	in.	33-1/16
	D	in.	13
	H	in.	34-5/8
Weight		lb.	119
External finish			Munsell 3Y 7.8/1.1
Remote controller			Wireless type
Control voltage (by built-in transformer)		VDC	12 - 24
Refrigerant piping			Not supplied
Refrigerant pipe size (Min. wall thickness)	Liquid	in.	3/8 (0.0315)
	Gas	in.	5/8 (0.0315)
Connection method	Indoor		Flared
	Outdoor		Flared
Between the indoor & out- door units	Height difference	ft.	50
	Piping length	ft.	100
Refrigerant charge (R410A)			4 lb. 3 oz.

NOTE: Test conditions are based on ARI 210/240.

※1: Rating conditions (Cooling) — Indoor: 80°FDB, 67°FWB, Outdoor: 95°FDB, (75°FWB)
(Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 47°FDB, 43°FWB
※2: (Heating) — Indoor: 70°FDB, 60°FWB, Outdoor: 17°FDB, 15°FWB

Rated frequency
Rated frequency
Maximum frequency

Due to continuing improvement, above specification may be subject to change without notice.

3-1. SPECIFICATIONS

EFFICIENCY RATINGS

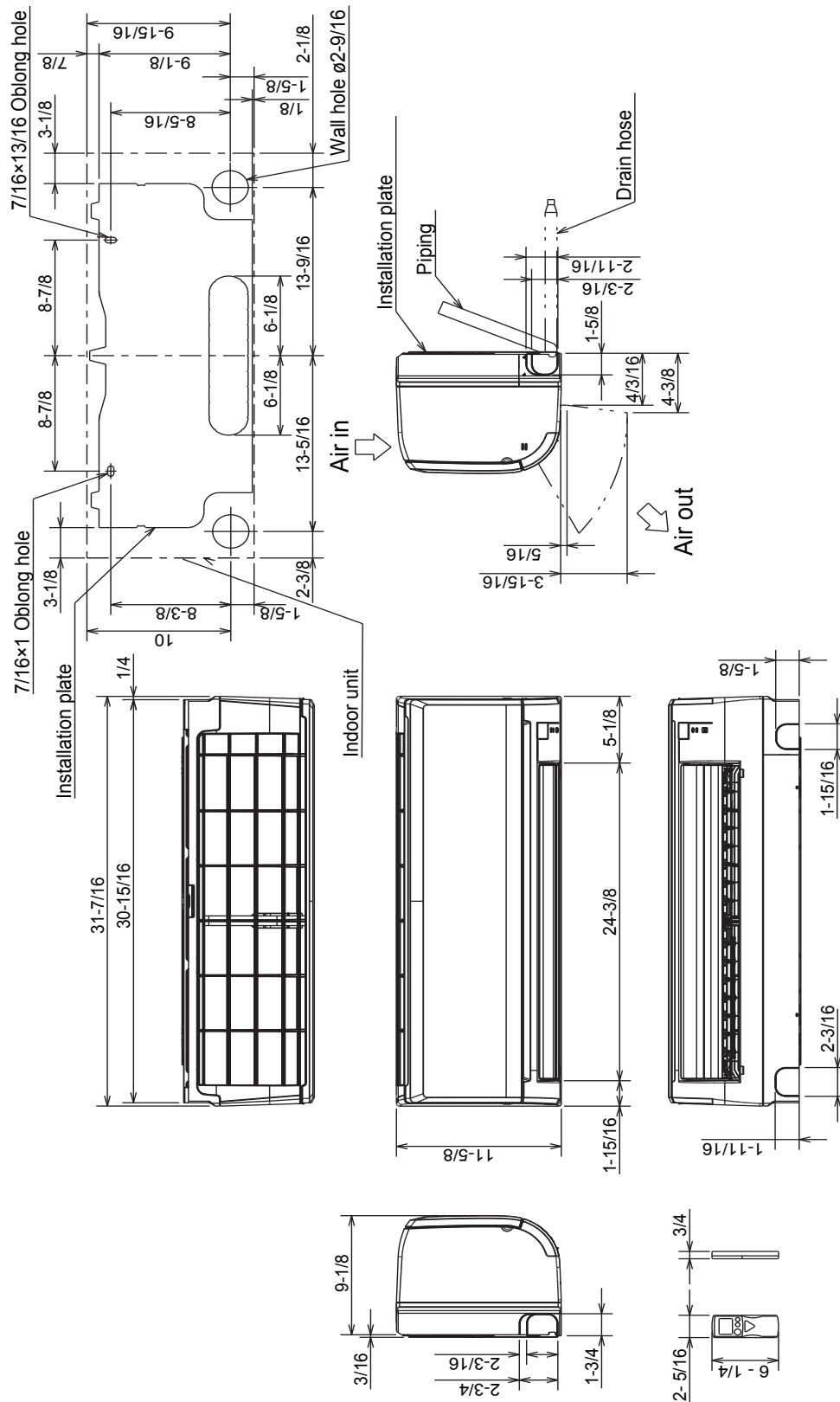
Outdoor Unit	Indoor Unit	SEER	EER	Energy Star	Tax Credit	Most Efficient
WALL-MOUNT COOLING ONLY						
MUY-GE09NA	MSY-GE09NA-8	21	13.6	Yes	Yes	Yes
MUY-GE12NA	MSY-GE12NA-8	20.5	12.5	Yes		Yes
MUY-GE15NA-1	MSY-GE15NA-8	21	13	Yes	Yes	Yes
MUY-GE18NA-1	MSY-GE18NA-8	19.2	10.5	Yes		
MUY-GE24NA	MSY-GE24NA	19	12.5			
Note: Efficiency values based on AHRI 210/240 test method.						

Due to continuing improvement, above specification may be subject to change without notice.

3-2. EXTERNAL DIMENSIONS

MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8

Unit: inch



Due to continuing improvement, above specification may be subject to change without notice.

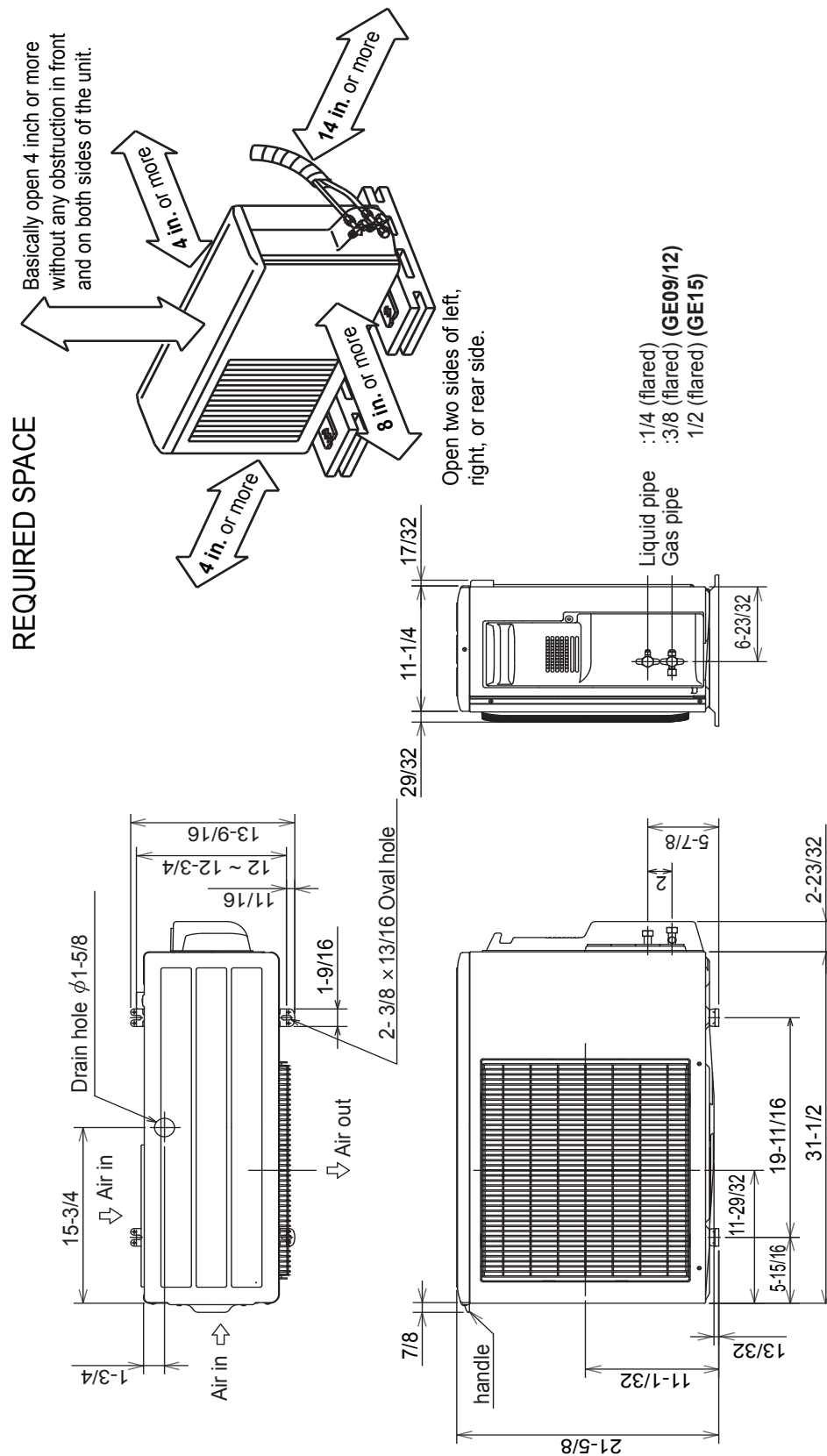
Due to continuing improvement, above specification may be subject to change without notice.



3-2. EXTERNAL DIMENSIONS

MUY-GE09NA MUY-GE12NA MUY-GE15NA-1

Unit: inch

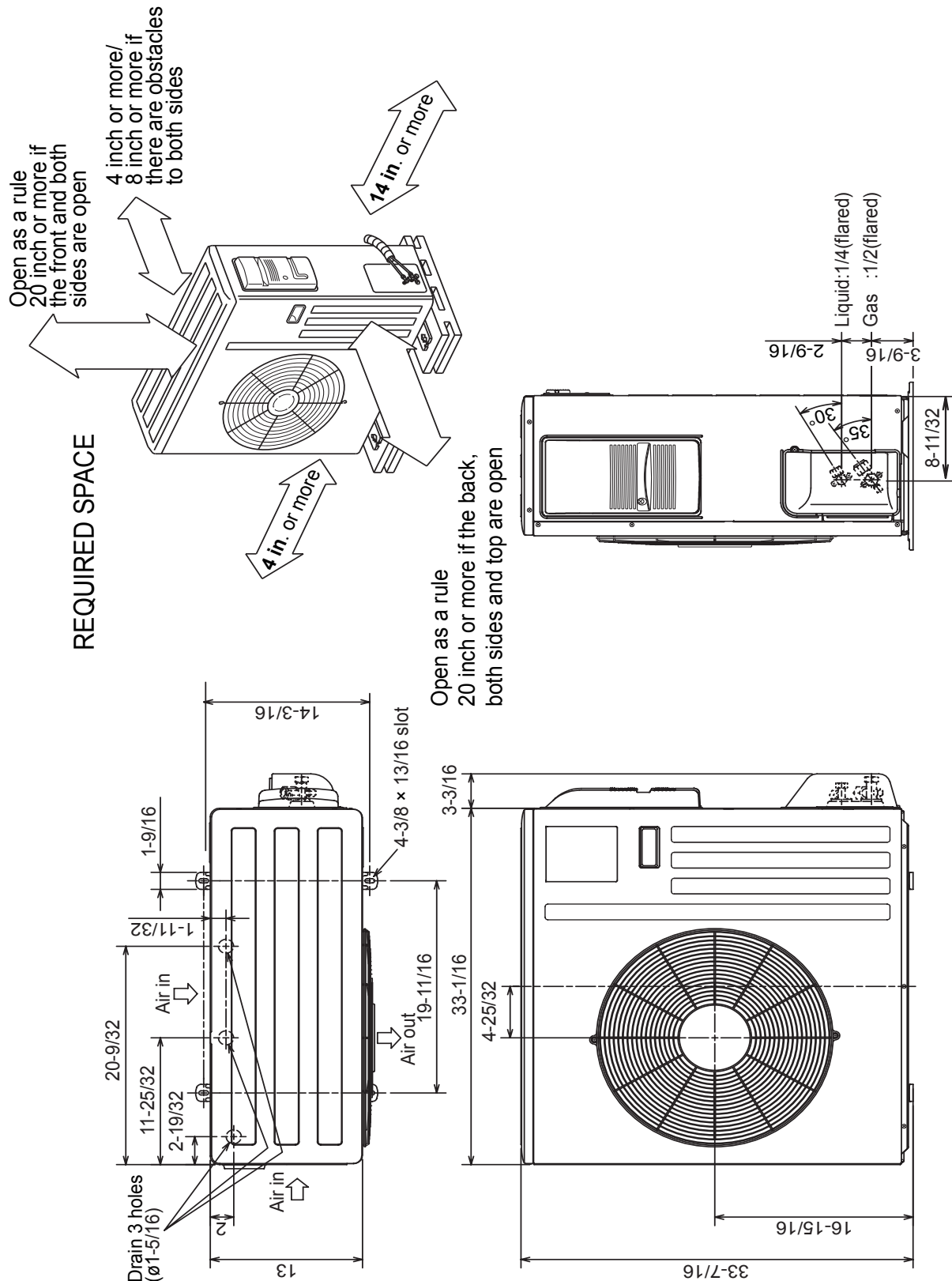


Due to continuing improvement, above specification may be subject to change without notice.

3-2. EXTERNAL DIMENSIONS

MUY-GE18NA-1

Unit: inch



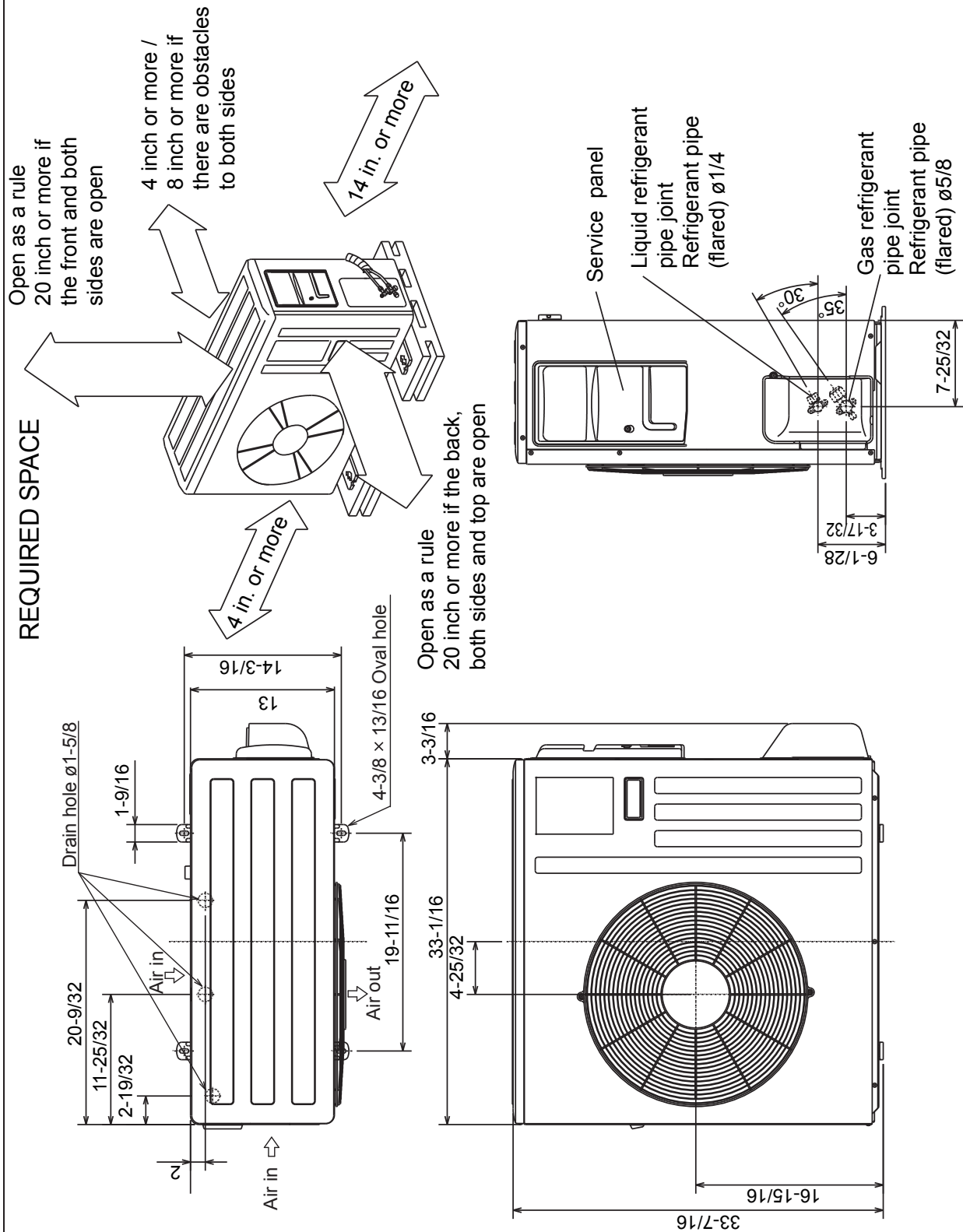
Due to continuing improvement, above specification may be subject to change without notice.

3-2. EXTERNAL DIMENSIONS

MUY-GE24NA

Unit: inch

REQUIRED SPACE

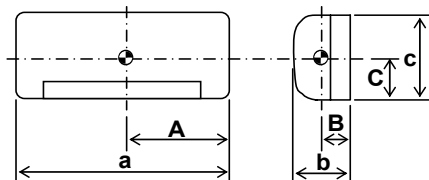


Due to continuing improvement, above specification may be subject to change without notice.

3-3. CENTER OF GRAVITY

MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8 MSY-GE24NA

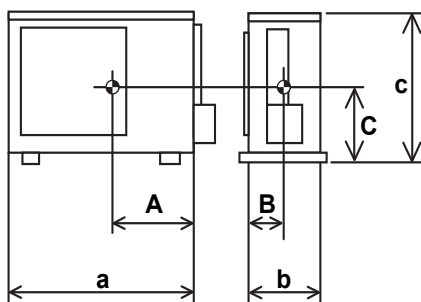
Unit: inch(mm)



Model name	A	B	C	a	b	c
MSY-GE09NA-8						
MSY-GE12NA-8	13-7/16 (340)	3-3/4 (95)	7-1/2 (190)	31-7/16 (798)	9-1/8 (232)	11-5/8 (295)
MSY-GE15NA-8						
MSY-GE18NA-8						
MSY-GE24NA	17-11/16 (450)	4-5/16 (110)	6-5/16 (160)	42-1/16 (1100)	10-1/4 (261)	12-13/16 (325)

MUY-GE09NA MUY-GE12NA MUY-GE15NA-1 MUY-GE18NA-1 MUY-GE24NA

Unit: inch(mm)



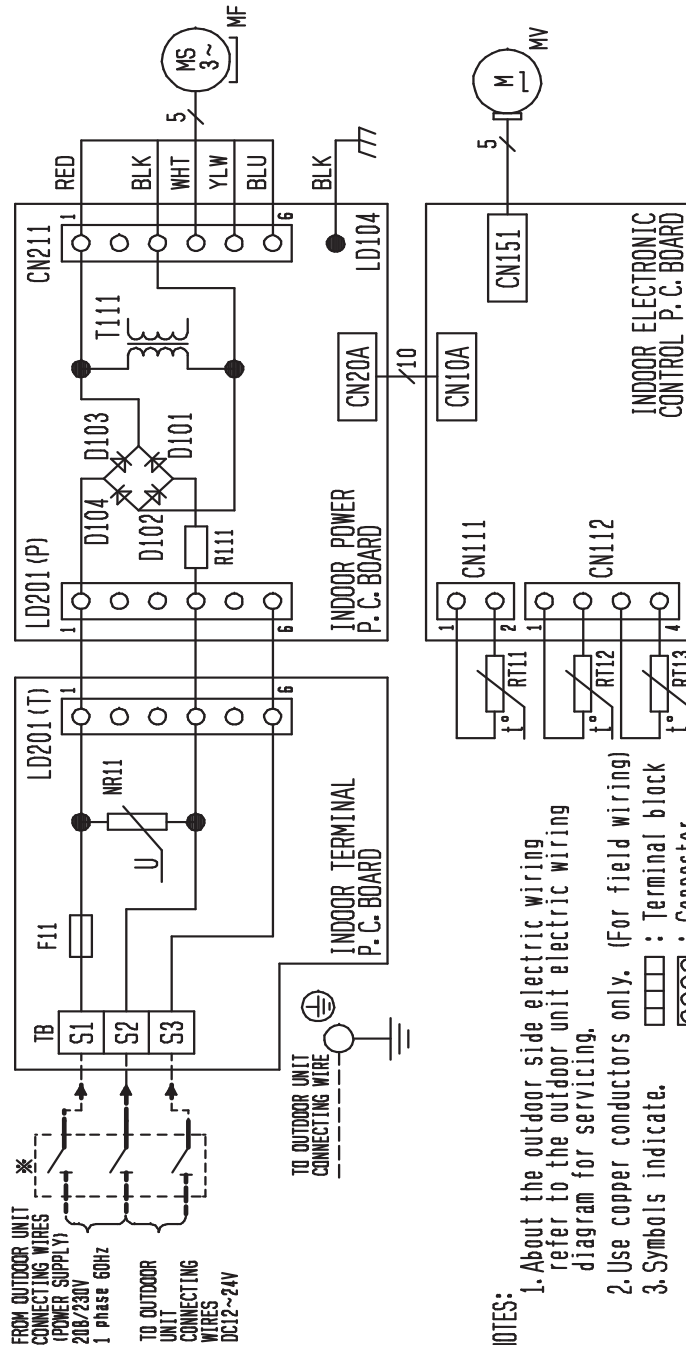
Model name	A	B	C	a	b	c
MUY-GE09NA						
MUY-GE12NA	11-1/16 (280)	5-9/16 (140)	9-1/2 (240)	31-1/2 (800)	11-1/4 (285)	21-5/8 (550)
MUY-GE15NA-1						
MUY-GE18NA-1	11-13/16 (300)	5-7/8 (150)	13-3/8 (340)	33-1/16 (840)	13 (330)	33-7/16 (850)
MUY-GE24NA						

Due to continuing improvement, above specification may be subject to change without notice.

3-4. ELECTRICAL WIRING DIAGRAMS

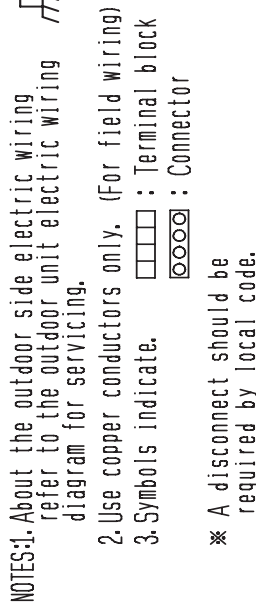
MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8

SYMBOL	NAME
D101 ~ D104	DIODE
F11	FUSE (T3, 15A/250V)
MF	FAN MOTOR
MV	VANE MOTOR (HORIZONTAL)
NR11	VARIATOR
R111	RESISTOR (3.9Ω/5W)
RT11	ROOM TEMP. THERMISTOR
RT12	COIL TEMP. THERMISTOR (MAIN)
RT13	COIL TEMP. THERMISTOR (SUB)
T111	TRANSFORMER
TB	TERMINAL BLOCK



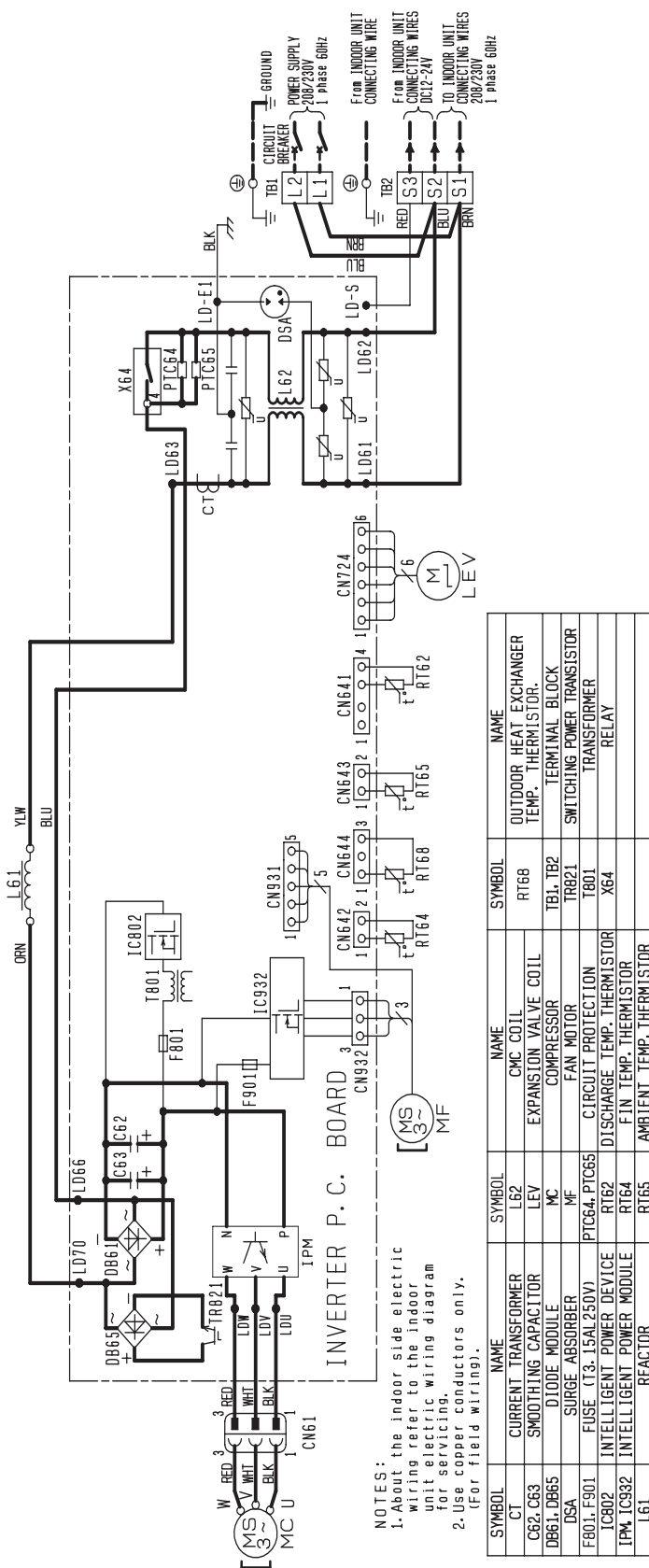
Due to continuing improvement, above specification may be subject to change without notice.

MSY-GE24NA



3-4. ELECTRICAL WIRING DIAGRAMS

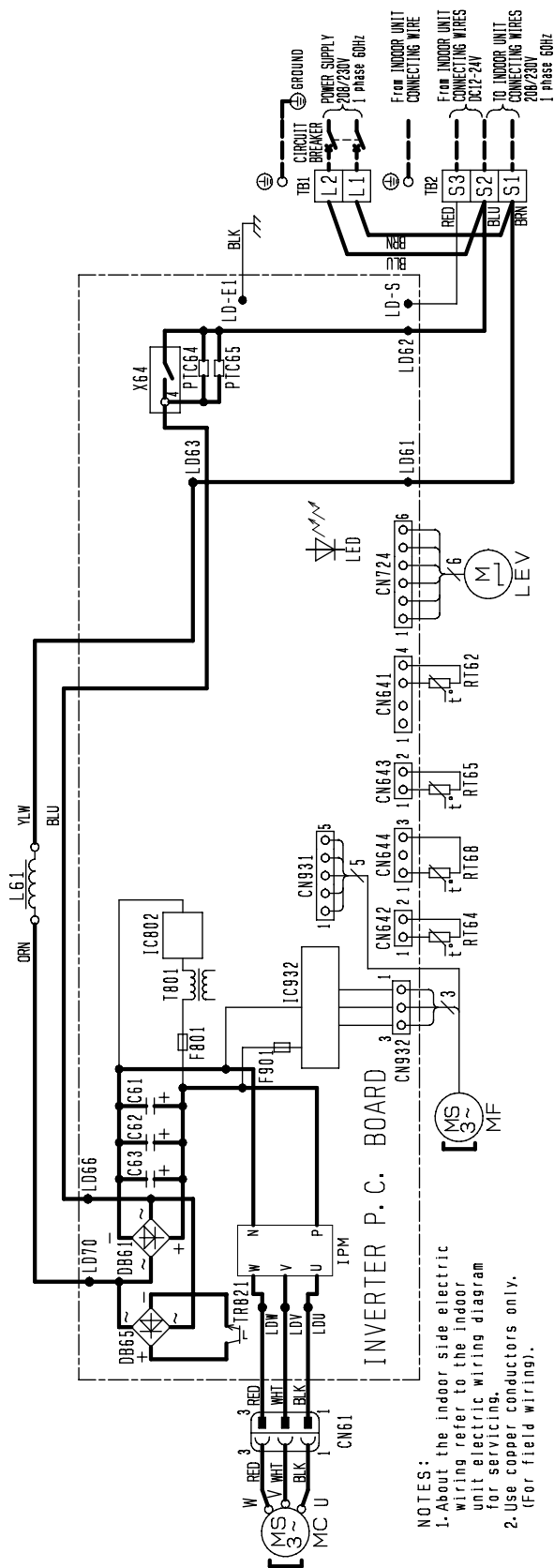
MUY-GE09NA MUY-GE12NA



Due to continuing improvement, above specification may be subject to change without notice.

3-4. ELECTRICAL WIRING DIAGRAMS

MUY-GE15NA-1

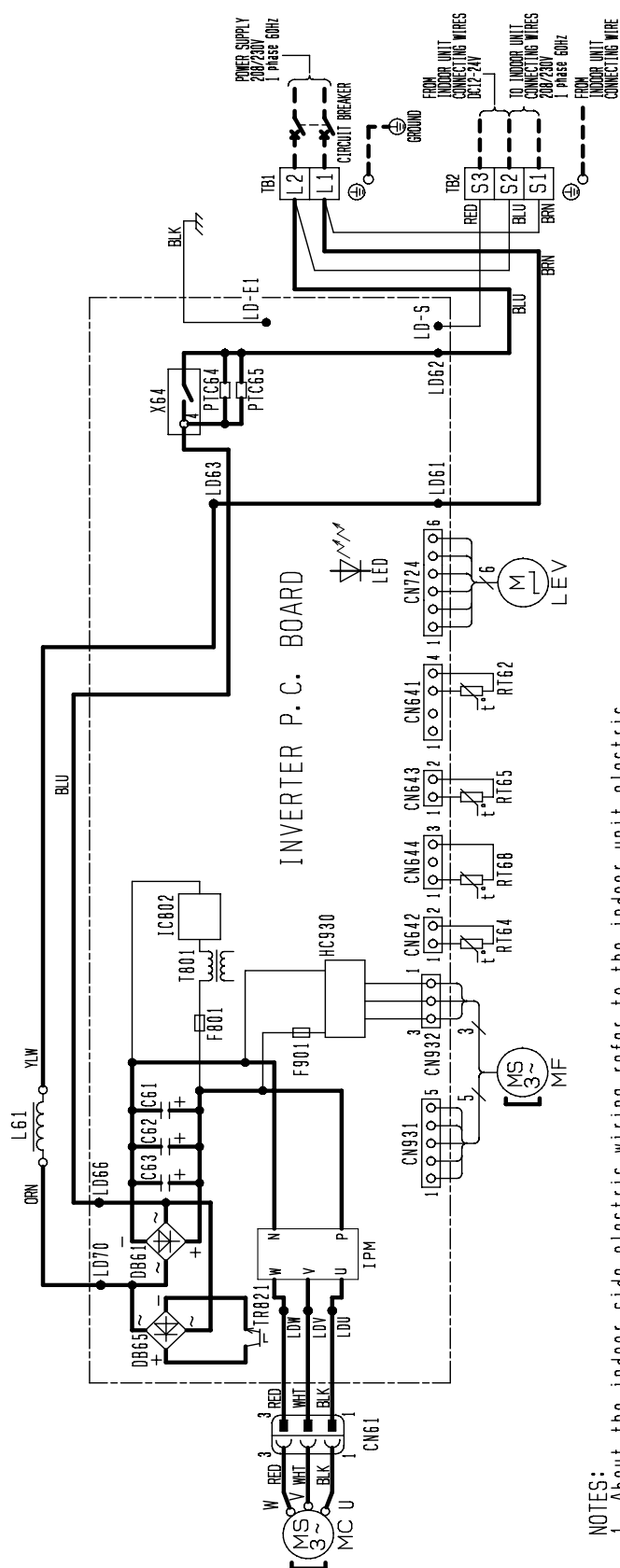


SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C61, C62, C63	SMOOTHING CAPACITOR	MC	COMPRESSOR	TB1, TB2	TERMINAL BLOCK
DB61, DB65	DIODE MODULE	MF	FAN MOTOR	TR821	SWITCHING POWER TRANSISTOR
F801, F901	FUSE (T3.15A/250V)	PTC64, PTC65	CIRCUIT PROTECTION	T801	TRANSFORMER
IC802	POWER DEVICE	RT62	DISCHARGE TEMP. THERMISTOR	X64	RELAY
IPM, IC932	POWER MODULE	RT64	FIN TEMP. THERMISTOR		
LED	LED	RT65	AMBIENT TEMP. THERMISTOR		
LEV	EXPANSION VALVE COIL	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR.		
L61	REACTOR				

Due to continuing improvement, above specification may be subject to change without notice.

3-4. ELECTRICAL WIRING DIAGRAMS

MUY-GE18NA-1



NOTES:

1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for servicing.
2. Use copper conductors only. (For field wiring).

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C61,C62,C63	SMOOTHING CAPACITOR	MC	COMPRESSOR	TB1, TB2	TERMINAL BLOCK
D861, D865	DIODE MODULE	MF	FAN MOTOR	TR821	SWITCHING POWER TRANSISTOR
F901, F901	FUSE (173, 15AL 250V)	PTC64, PTC65	CIRCUIT PROTECTION	T801	TRANSFORMER
HC930, 1PM	POWER MODULE	RT62	DISCHARGE TEMP. THERMISTOR		RELAY
IC802	POWER DEVICE	RT64	F IN TEMP. THERMISTOR	X64	
LED	LED	RT65	AMBIENT TEMP. THERMISTOR		
LEV	EXPANSION VALVE COIL	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR		
161	REACTOR				

Due to continuing improvement, above specification may be subject to change without notice.

MUY-GE24NA



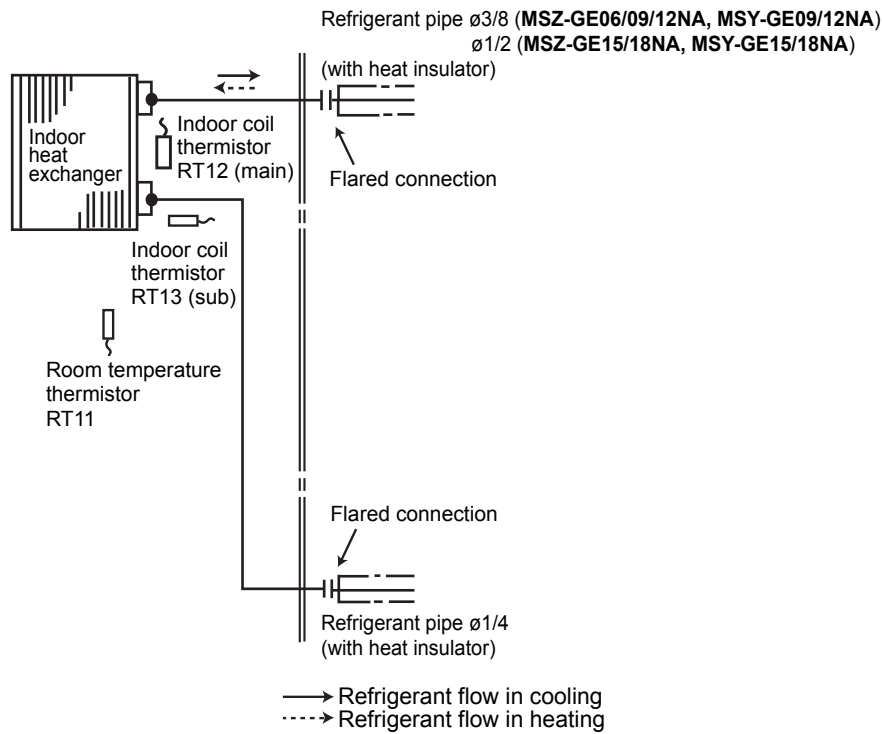
SYMBOL	NAME	SYMBOL	NAME
CB1 ~ 3	SMOOTHING CAPACITOR	PFC	POWER FACTOR CONTROLLER
FF62	FUSE (T2AL250V)	PTC64	CIRCUIT PROTECTION
F65, F66	FUSE (T6. 3AL250V)	PTC65	CIRCUIT PROTECTION
FF80	FUSE (T3. 15AL250V)	RT62	DISCHARGE TEMP. THERMISTOR
FF901	FUSE (T3. 15AL250V)	RT64	FIN TEMP. THERMISTOR
IC932	INTELLIGENT POWER MODULE	RT65	AMBIENT TEMP. THERMISTOR
IPM	INTELLIGENT POWER MODULE		OUTDOOR HEAT EXCHANGER
L	REACTOR	RT68	TEMP. THERMISTOR
LEV	EXPANSION VALVE COIL	TB1, TB2	TERMINAL BLOCK
MC	COMPRESSOR	T801	TRANSFORMER
ME	FAN MOTOR	X64	RELAY

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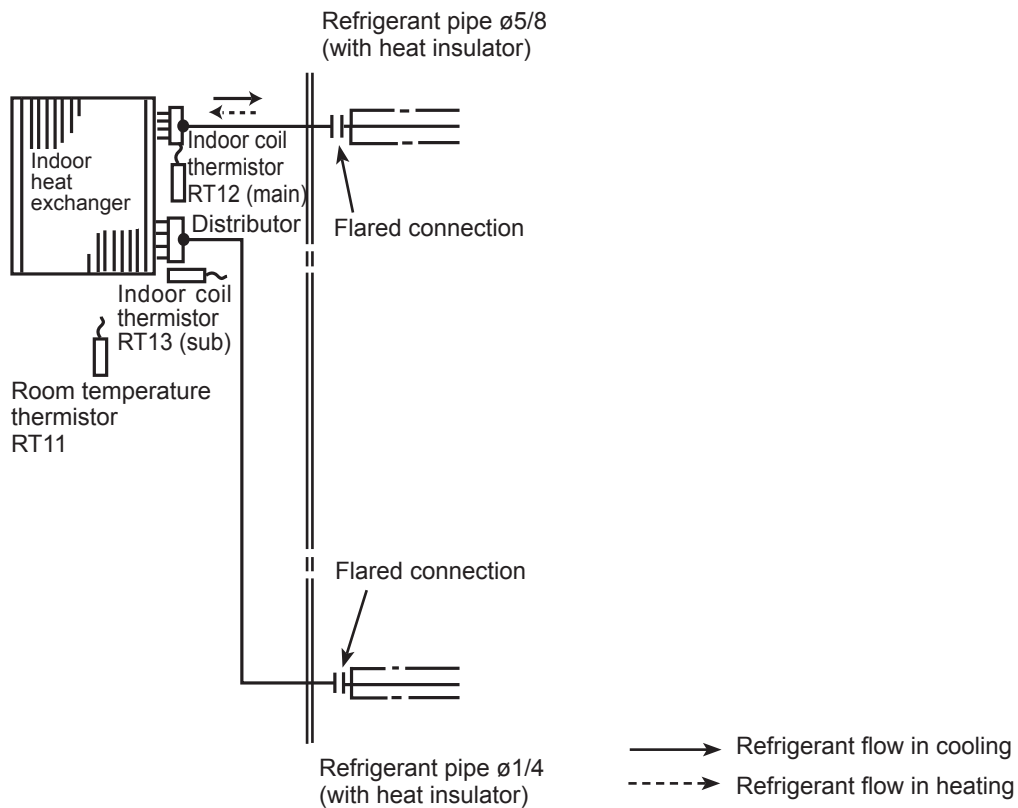
3-5. REFRIGERANT SYSTEM DIAGRAMS

MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8

Unit: inch



MSY-GE24NA

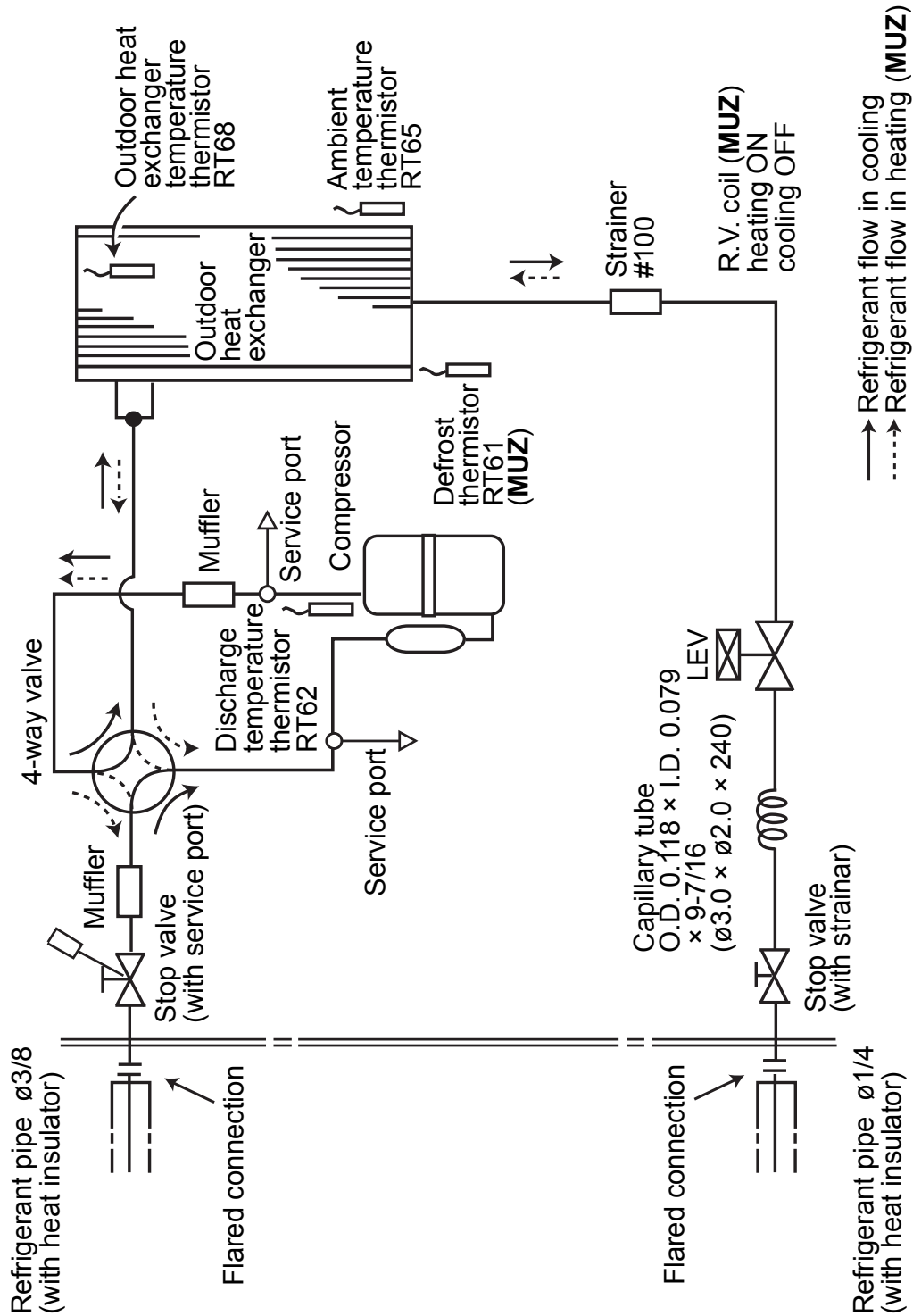


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3-5. REFRIGERANT SYSTEM DIAGRAMS

MUY-GE09NA

Unit: inch

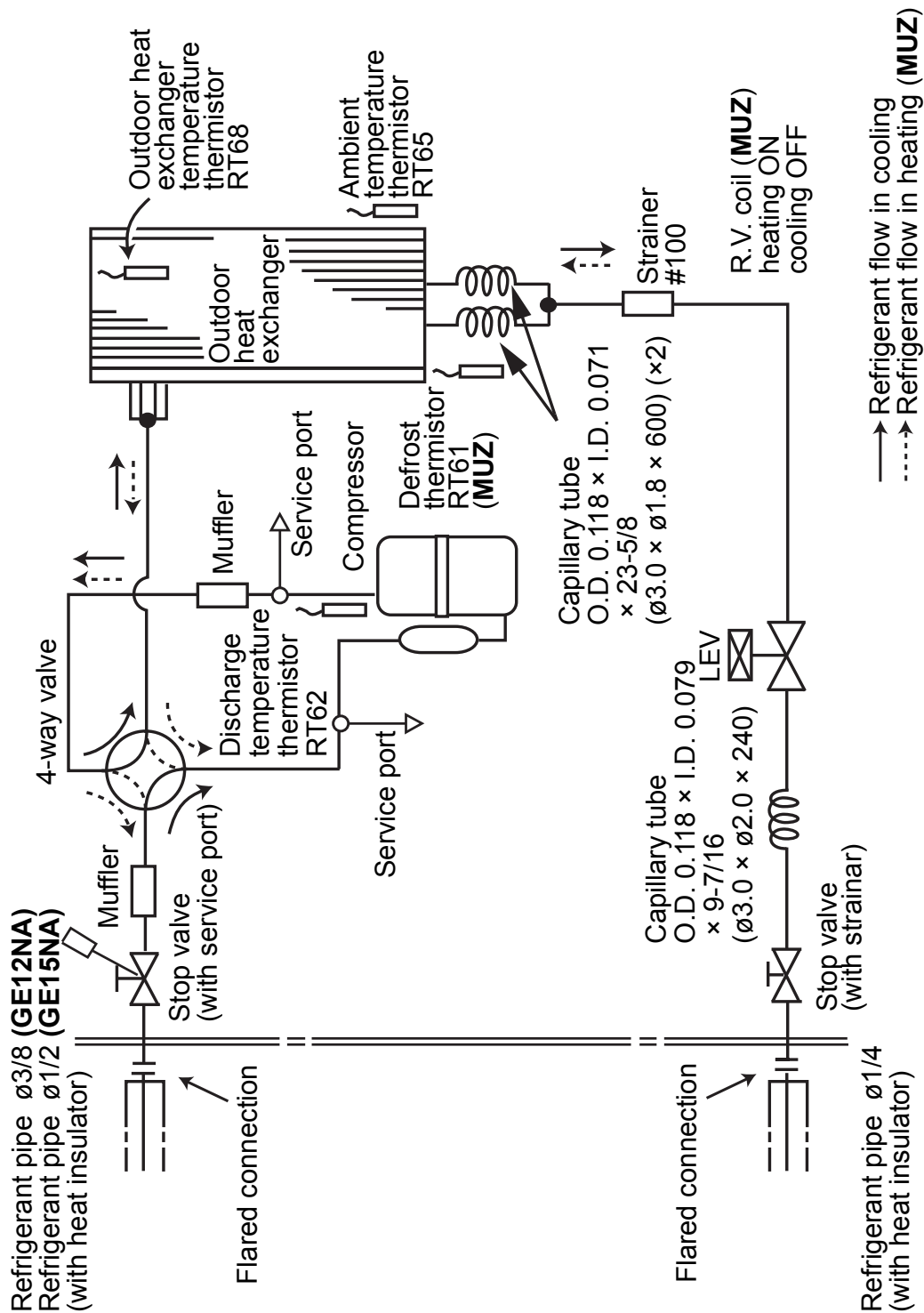


Due to continuing improvement, above specification may be subject to change without notice.

3-5. REFRIGERANT SYSTEM DIAGRAMS

MUY-GE12NA MUY-GE15NA-1

Unit: inch

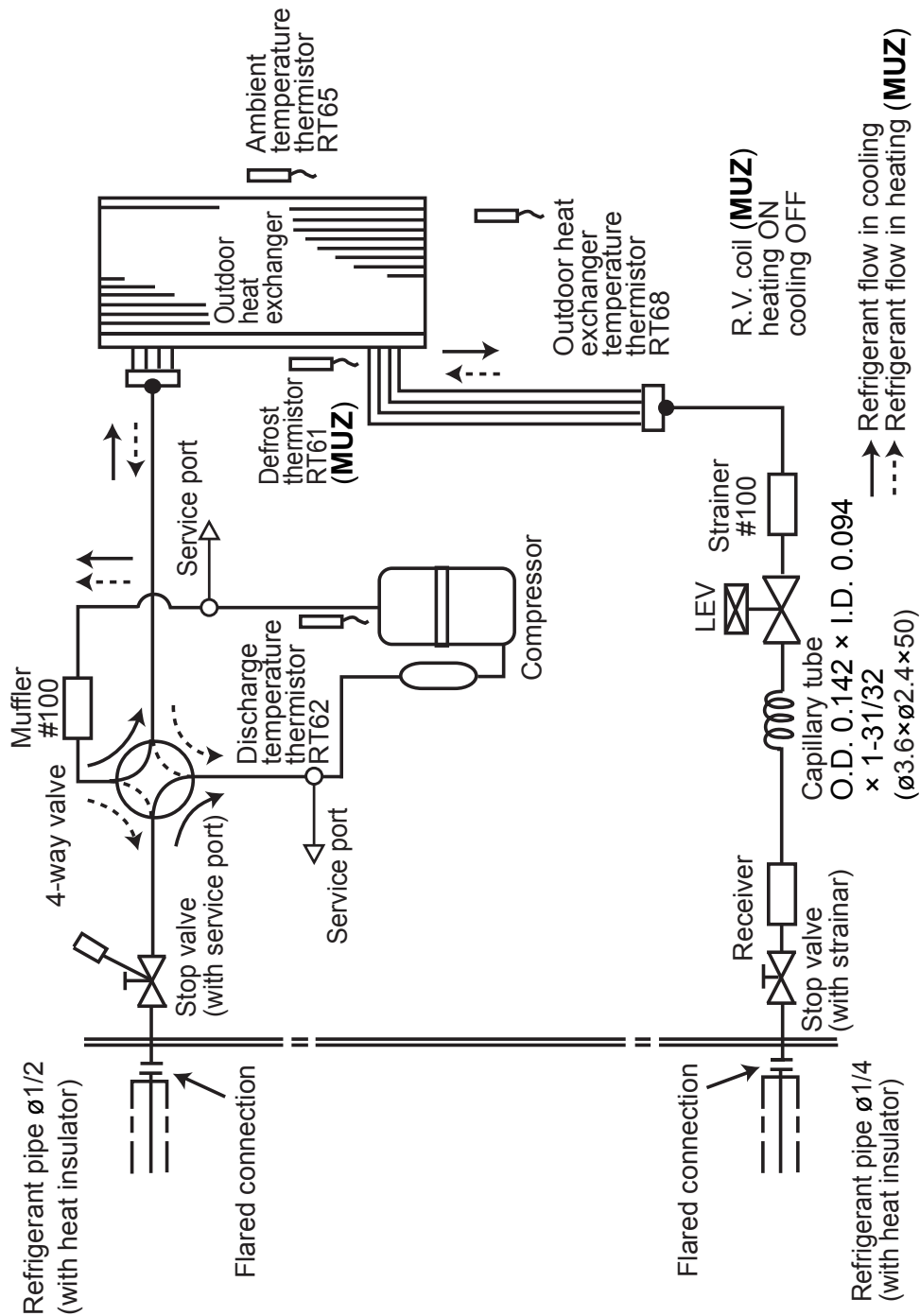


Due to continuing improvement, above specification may be subject to change without notice.

3-5. REFRIGERANT SYSTEM DIAGRAMS

MUY-GE18NA-1

Unit: inch

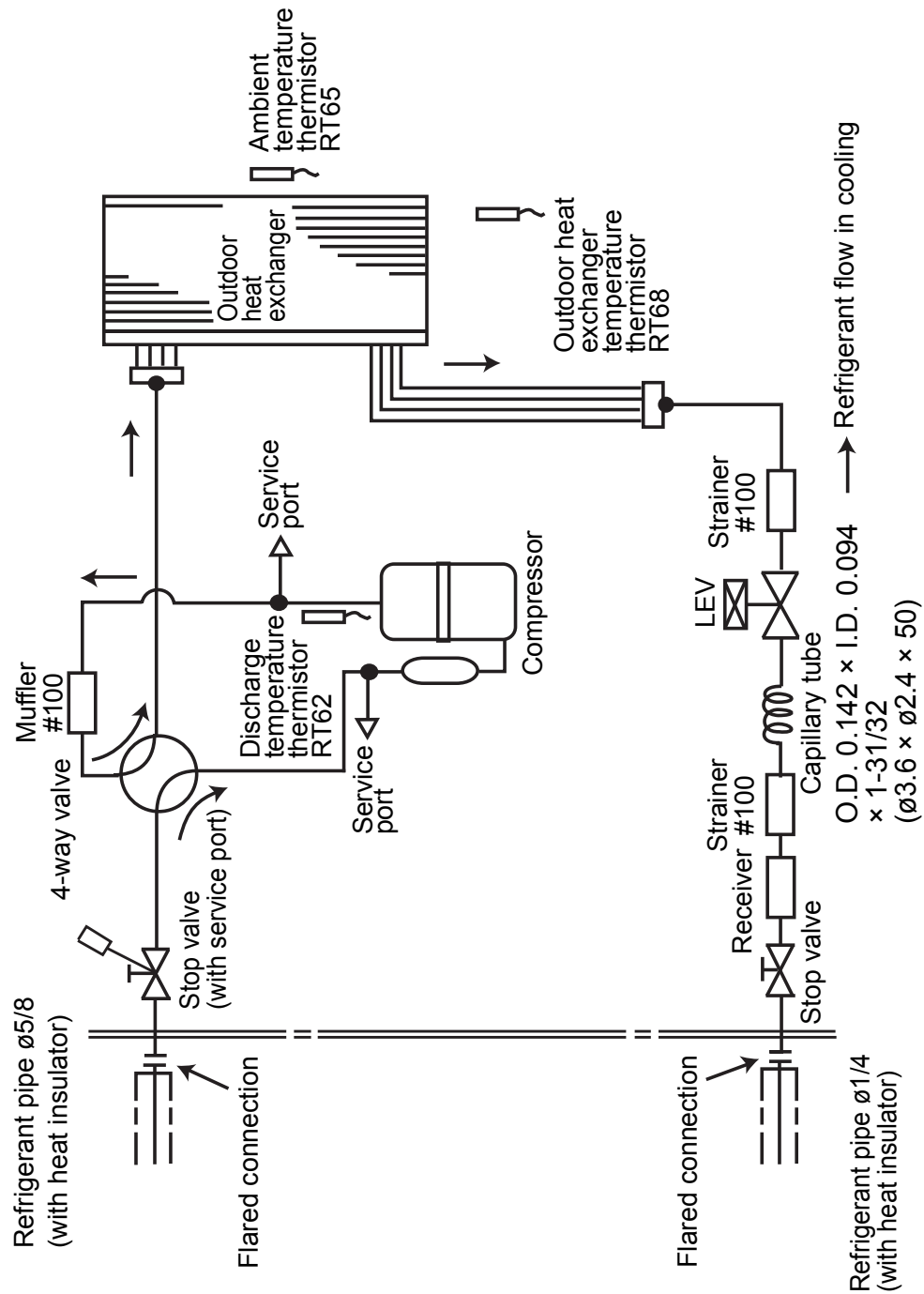


Due to continuing improvement, above specification may be subject to change without notice.

3-5. REFRIGERANT SYSTEM DIAGRAMS

MUY-GE24NA

Unit: inch

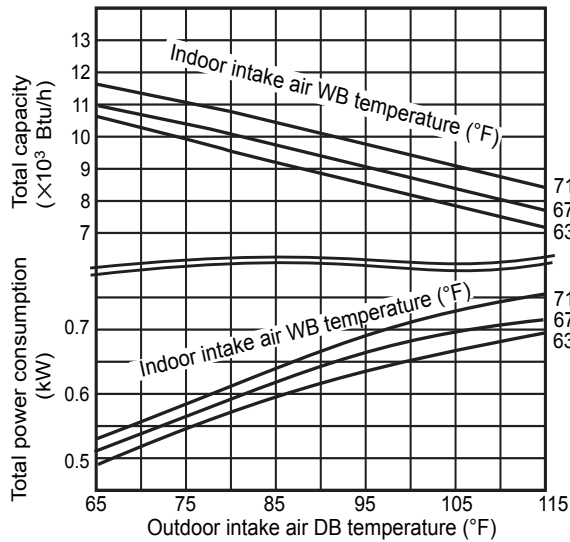


Due to continuing improvement, above specification may be subject to change without notice.

3-6. CAPACITY CORRECTION CURVE BY TEMPERATURE

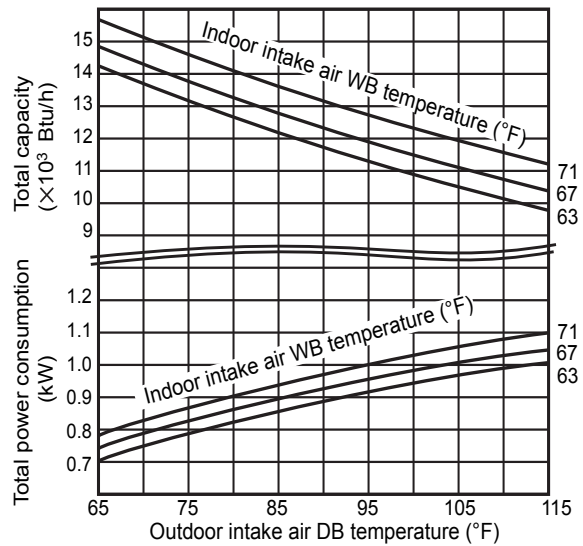
MUY-GE09NA

SHF at rating condition = 0.76
Airflow = 307 CFM



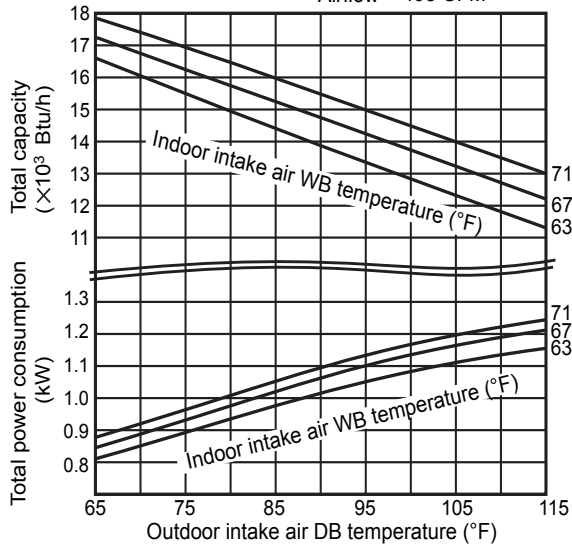
MUY-GE12NA

SHF at rating condition = 0.73
Airflow = 350 CFM



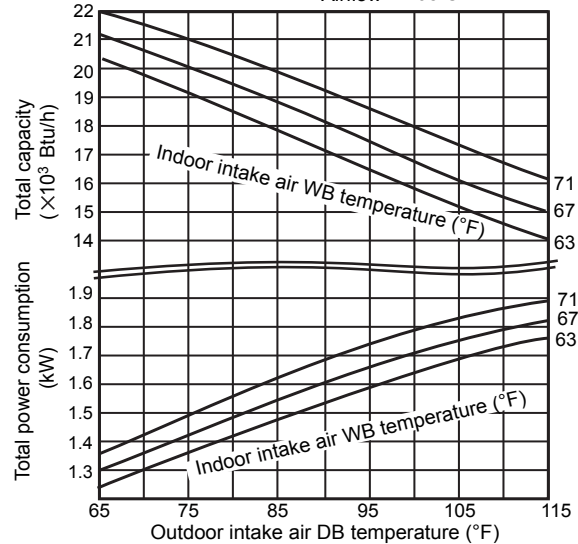
MUY-GE15NA-1

SHF at rating condition = 0.80
Airflow = 498 CFM



MUY-GE18NA-1

SHF at rating condition = 0.71
Airflow = 498 CFM



Due to continuing improvement, above specification may be subject to change without notice.

3-6. CAPACITY CORRECTION CURVE BY TEMPERATURE

MUY-GE24NA

**DUE TO CONTINUES RESEARCH AND PRODUCT IMPROVEMENT
DATA ARE STILL UNDER REVIEW**

Due to continuing improvement, above specification may be subject to change without notice.

3-7. CAPACITY CORRECTION TABLE BY TEMPERATURE

MUY-GE09NA MUY-GE12NA MUY-GE15NA-1 MUY-GE18NA-1

(1) COOLING CAPACITY		Outdoor intake air DB temperature (°F)														
Model	Indoor air	75			85			95			105			115		
	IWB (°F)	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC
MUY-GE09NA	71	11.0	7.6	0.59	10.3	7.1	0.64	9.7	6.6	0.69	9.0	6.2	0.73	8.3	5.7	0.76
	67	10.4	8.6	0.55	9.7	8.0	0.61	9.0	7.4	0.66	8.4	6.9	0.70	7.7	6.3	0.73
	63	9.8	9.4	0.53	9.1	8.7	0.58	8.5	8.1	0.63	7.7	7.3	0.67	7.0	6.7	0.70
MUY-GE12NA	71	14.7	8.9	0.85	13.7	8.3	0.94	12.9	7.8	1.01	12.0	7.3	1.06	11.0	6.7	1.10
	67	13.9	10.3	0.81	13.0	9.6	0.89	12.0	8.9	0.96	11.2	8.3	1.02	10.3	7.6	1.07
	63	13.1	11.4	0.77	12.1	10.6	0.85	11.3	9.9	0.92	10.3	9.0	0.98	9.4	8.2	1.02
MUY-GE15NA-1	71	17.2	11.4	0.96	16.0	10.7	1.05	15.1	10.0	1.13	14.0	9.3	1.19	12.9	8.6	1.24
	67	16.2	13.0	0.91	15.1	12.1	1.00	14.0	11.2	1.08	13.0	10.4	1.14	12.0	9.6	1.20
	63	15.3	14.2	0.86	14.1	13.2	0.96	13.2	12.3	1.03	12.0	11.2	1.10	10.9	10.2	1.14
MUY-GE18NA-1	71	21.1	12.2	1.46	19.7	11.4	1.60	18.5	10.7	1.72	17.2	9.9	1.81	15.8	9.1	1.89
	67	20.0	14.2	1.38	18.6	13.2	1.52	17.2	12.2	1.64	16.0	11.4	1.74	14.7	10.4	1.82
	63	18.7	15.8	1.31	17.4	14.7	1.45	16.2	13.6	1.57	14.7	12.4	1.67	13.4	11.3	1.74

NOTE: 1. IWB: Intake air wet-bulb temperature

TC: Total Capacity ($\times 10^3$ Btu/h)

SHC: Sensible Heat Capacity ($\times 10^3$ Btu/h)

TPC: Total Power Consumption (kW)

2. SHC is based on 80°F of indoor Intake air DB temperature.

Due to continuing improvement, above specification may be subject to change without notice.

3-8. CAPACITY CORRECTION CURVE BY REFRIGERANT PIPING LENGTH

**DUE TO CONTINUES RESEARCH AND PRODUCT IMPROVEMENT
DATA ARE STILL UNDER REVIEW**

Due to continuing improvement, above specification may be subject to change without notice.

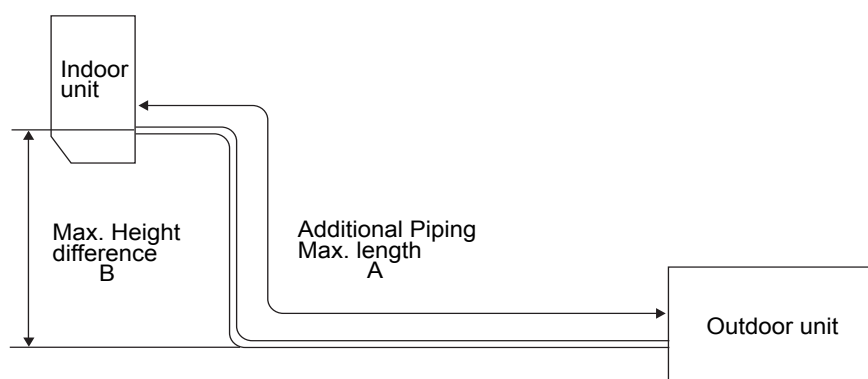
3-9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

(1) Cooling capacity correction

Refrigerant piping length (one way: ft.)				
	25 (std.)	40	65	100
MUY-GE09NA MUY-GE12NA-1 MUY-GE15NA-1 MUY-GE18NA-1	1.0	0.954	0.878	-
MUY-GE24NA	1.0	0.954	0.878	0.771

(2) Maximum refrigerant piping length & maximum height difference

Model	Refrigerant piping: ft		Piping size: in.			
	Additional piping Max. length A	Additional piping Max. height B	Gas		Liquid	
			Outside diameter	Minimum Wall thickness	Outside diameter	Minimum Wall thickness
MUY-GE09NA	65	40	ϕ3/8	0.0315	ϕ1/4	0.0315
MUY-GE12NA-1 MUY-GE15NA-1	65	40	ϕ1/2	0.0315	ϕ1/4	0.0315
MUY-GE18NA-1	100	50	ϕ1/2	0.0315	ϕ3/8	0.0315
MUY-GE24NA	100	50	ϕ5/8	0.0315	ϕ3/8	0.0315



Due to continuing improvement, above specification may be subject to change without notice.

3-9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

(3) M-SERIES COOLING CORRECTION

	70	77	81	86	95	104	115
60	1.11	1.06	1.01	0.97	0.91	0.83	0.76
63	1.16	1.10	1.06	1.02	0.96	0.88	0.81
64	1.18	1.13	1.08	1.04	0.98	0.90	0.83
68	1.23	1.18	1.14	1.10	1.03	0.96	0.89
72	1.28	1.23	1.20	1.15	1.09	1.02	0.95
75	1.34	1.29	1.26	1.22	1.15	1.08	1.02
79	1.38	1.34	1.32	1.28	1.21	1.14	1.07

Due to continuing improvement, above specification may be subject to change without notice.

3-10. CHARGE CALCULATIONS

(1) ADDITIONAL REFRIGERANT CHARGE (R410A: oz.)

NOTE: Refrigerant piping exceeding 25 ft. requires additional refrigerant charge according to the calculation.

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.					
		25ft	30ft	40ft	50ft	60ft	65ft
MUY-GE09NA	1 lb. 12 oz.	0	1.62	4.86	8.10	11.34	12.96
MUY-GE12NA	2 lb. 9 oz.						
MUY-GE15NA-1							

NOTE: Calculation: X oz. = 1.62/5 oz./ft × (Refrigerant piping length (ft) - 25)

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.								
		25	30	40	50	60	70	80	90	100
MUY-GE15NA-1	3 lb. 7 oz.	0	1.08	3.24	5.40	7.56	9.72	11.88	14.04	16.20

NOTE: Calculation: X oz. = 1.08/5 oz./ft × (Refrigerant piping length (ft) - 25)

NOTE: Refrigerant piping exceeding 33 ft. requires additional refrigerant charge according to the calculation.

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.							
		33	40	50	60	70	80	90	100
MUY-GE24NA	4 lb. 3 oz.	0	4.14	10.06	15.98	21.90	27.82	33.74	39.66

NOTE: Calculation: X oz. = 2.96/5 oz./ft × (Refrigerant piping length (ft) - 33)

3-11. AIR FLOW DATA

OUTLET AIR SPEED AND COVERAGE

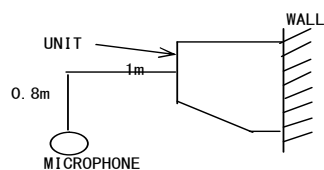
Model name	Mode	Function	Airflow (CFM)	Air speed (ft./s.)	Coverage (ft.)
MSY-GE09NA-8	COOL	Dry	321	16.3	23.5
		Wet	286	14.5	21.0
MSY-GE12NA-8	COOL	Dry	321	16.3	23.5
		Wet	286	14.5	21.0
MSY-GE15NA-8	COOL	Dry	420	21.3	30.5
		Wet	385	19.5	28.0
MSY-GE18NA-8	COOL	Dry	420	21.3	30.5
		Wet	385	19.5	28.0
MSY-GE24NA	COOL	Dry	738	18.0	36.9
		Wet	661	16.1	33.2

- The air coverage is the figure up to the position where the air speed is 1 ft./s., when air is blown out horizontally from the unit properly at the High speed position.
The coverage should be used only as a general guideline since it varies according to the size of the room and furniture arranged inside the room.

Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

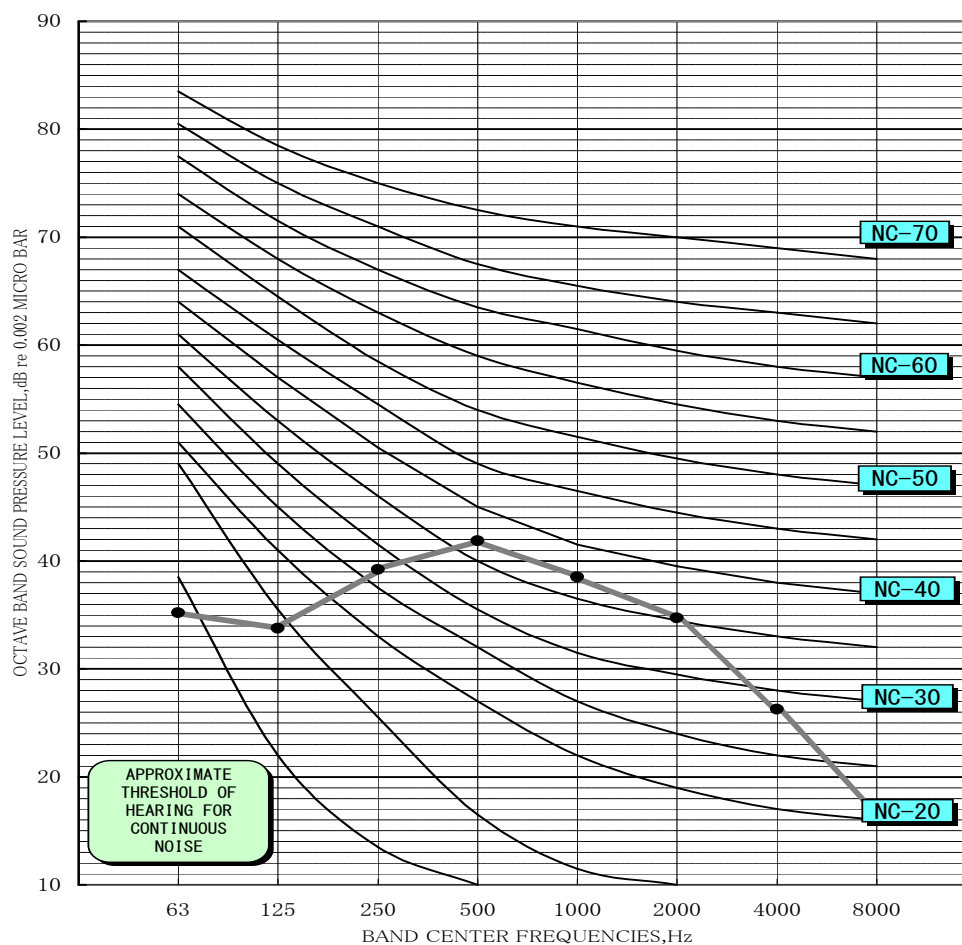
MSY-GE09NA-8



NOTCH	SPL (dB (A))	LINE
COOL (SHi)	43	●—●
HEAT (SHi)	—	□---□

Test conditions are based on JIS Z8731

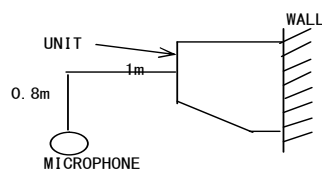
Ambient temperature Cooling DB : 27°C WB:19°C
Heating DB : 20°C WB:15°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

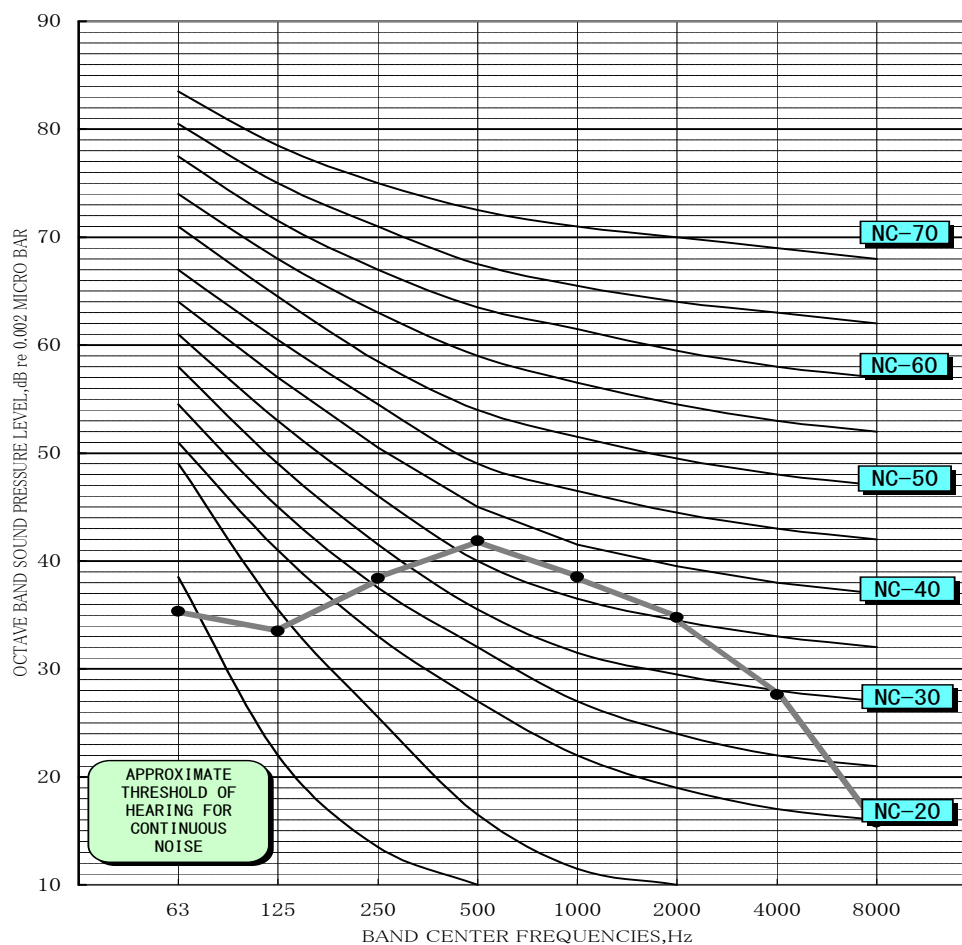
MSY-GE12NA-8



NOTCH	SPL (dB (A))	LINE
COOL (SHi)	45	●—●
HEAT (SHi)	—	□---□

Test conditions are based on JIS Z8731

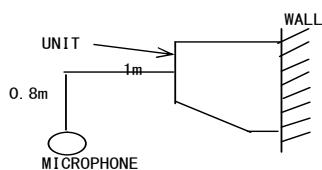
Ambient temperature Cooling DB : 27°C WB:19°C
Heating DB : 20°C WB:15°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

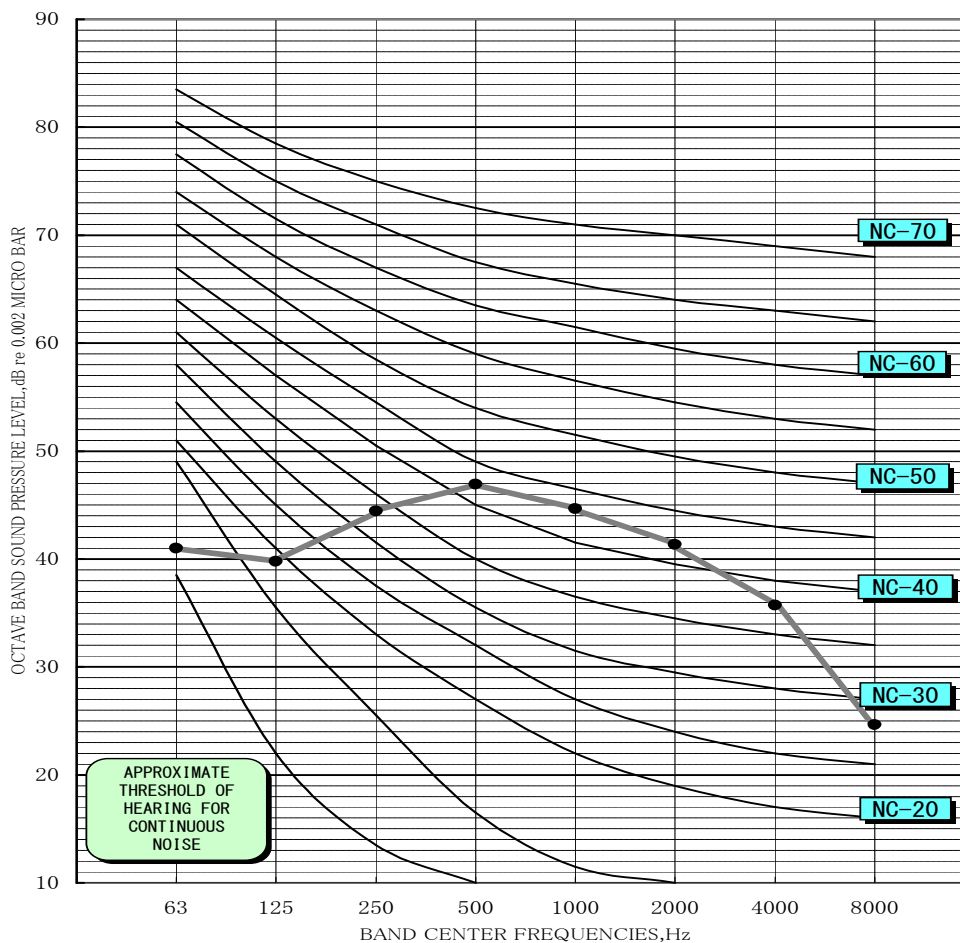
MSY-GE15NA-8



NOTCH	SPL (dB (A))	LINE
COOL (SHi)	49	●—●
HEAT (SHi)	—	□---□

Test conditions are based on JIS Z8731

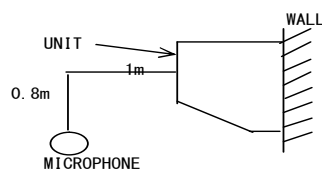
Ambient temperature Cooling DB : 27°C WB:19°C
Heating DB : 20°C WB:15°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

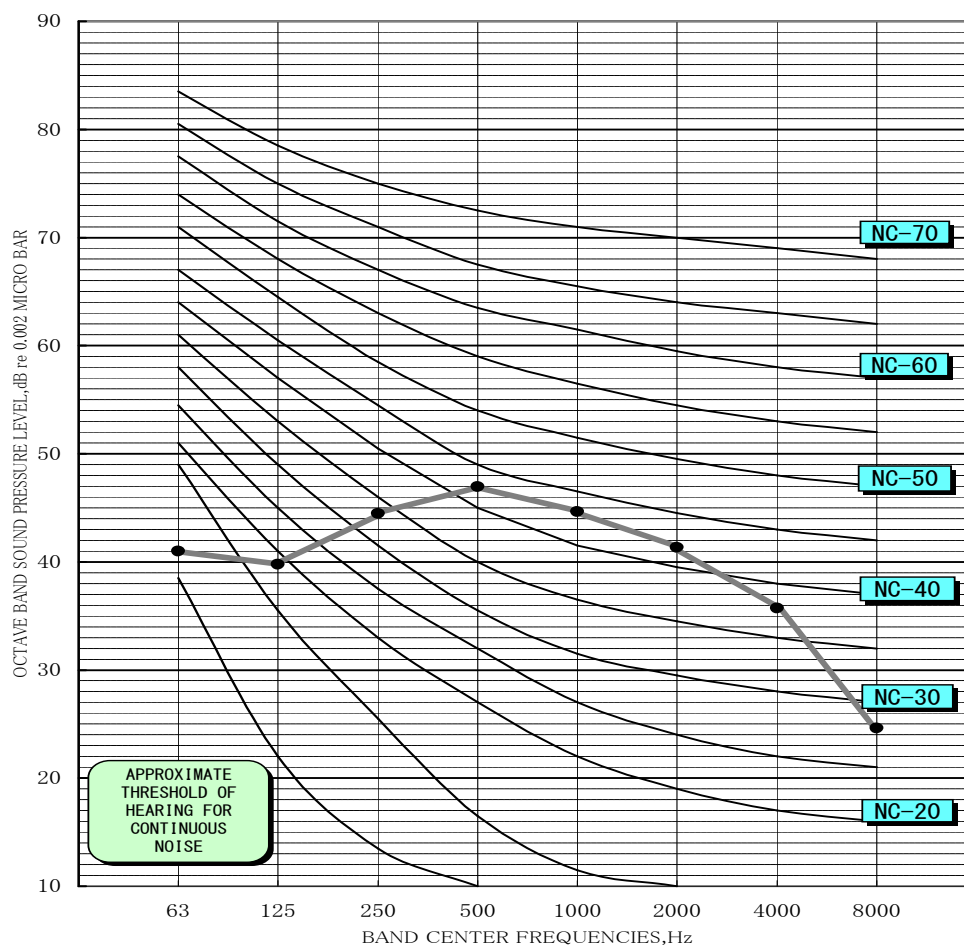
MSY-GE18NA-8



NOTCH	SPL (dB (A))	LINE
COOL (SHi)	49	●—●
HEAT (SHi)	—	□---□

Test conditions are based on JIS Z8731

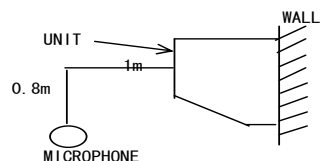
Ambient temperature Cooling DB : 27°C WB:19°C
Heating DB : 20°C WB:15°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

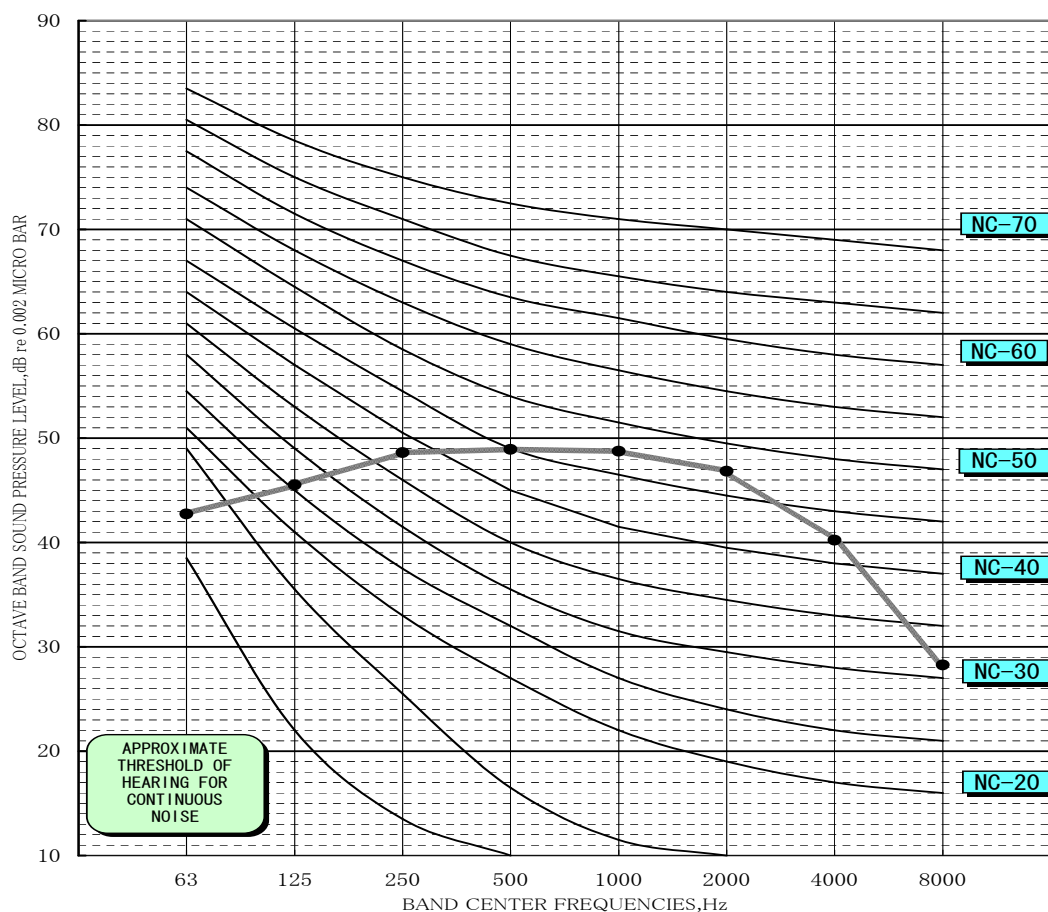
MSY-GE24NA



NOTCH	SPL (dB (A))	LINE
COOL (Rated)	53	●—●
HEAT (Rated)	—	□---□

Test conditions are based on JIS Z8731

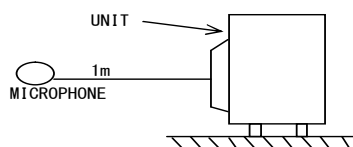
Ambient temperature Cooling DB: 27°C WB: 19°C
Heating DB: 20°C WB: 15°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

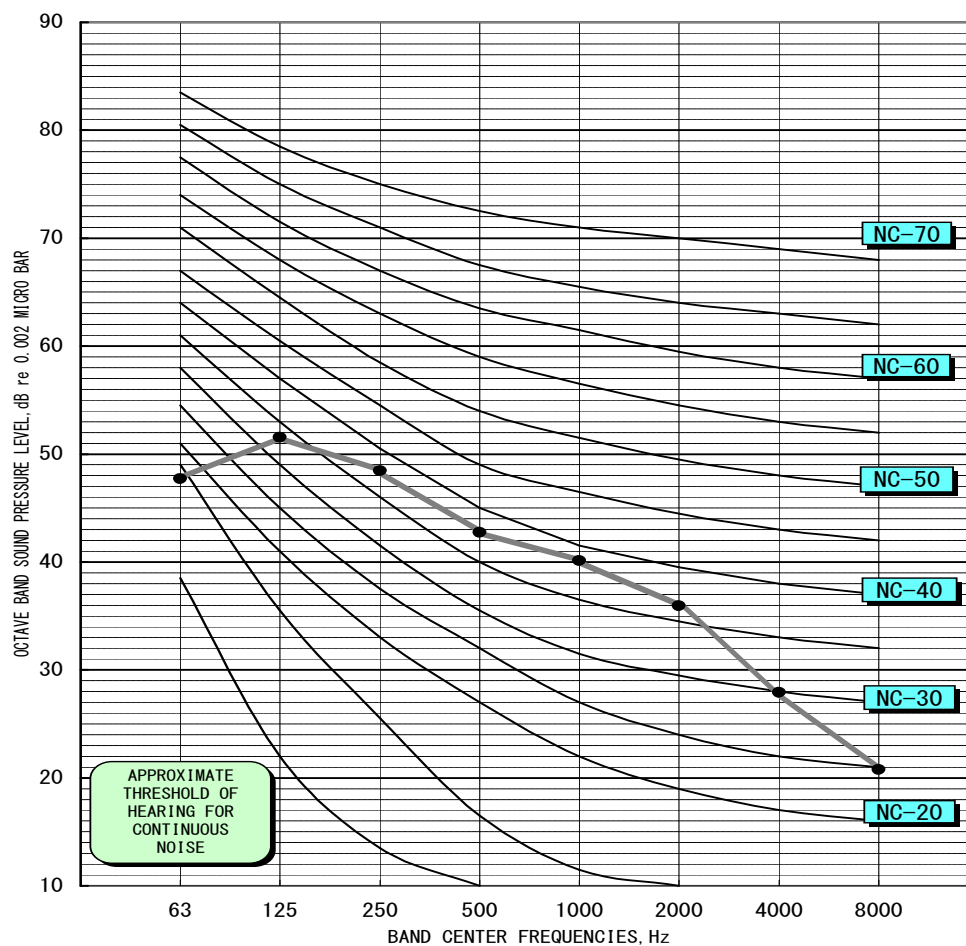
MUY-GE09NA



NOTCH	SPL (dB (A))	LINE
COOL	46	●—●
HEAT	—	□---□

Test conditions are based on JIS Z8731

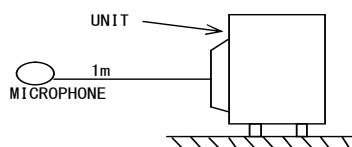
Ambient temperature Cooling DB : 35°C WB: 24°C
Heating DB : 7°C WB: 6°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

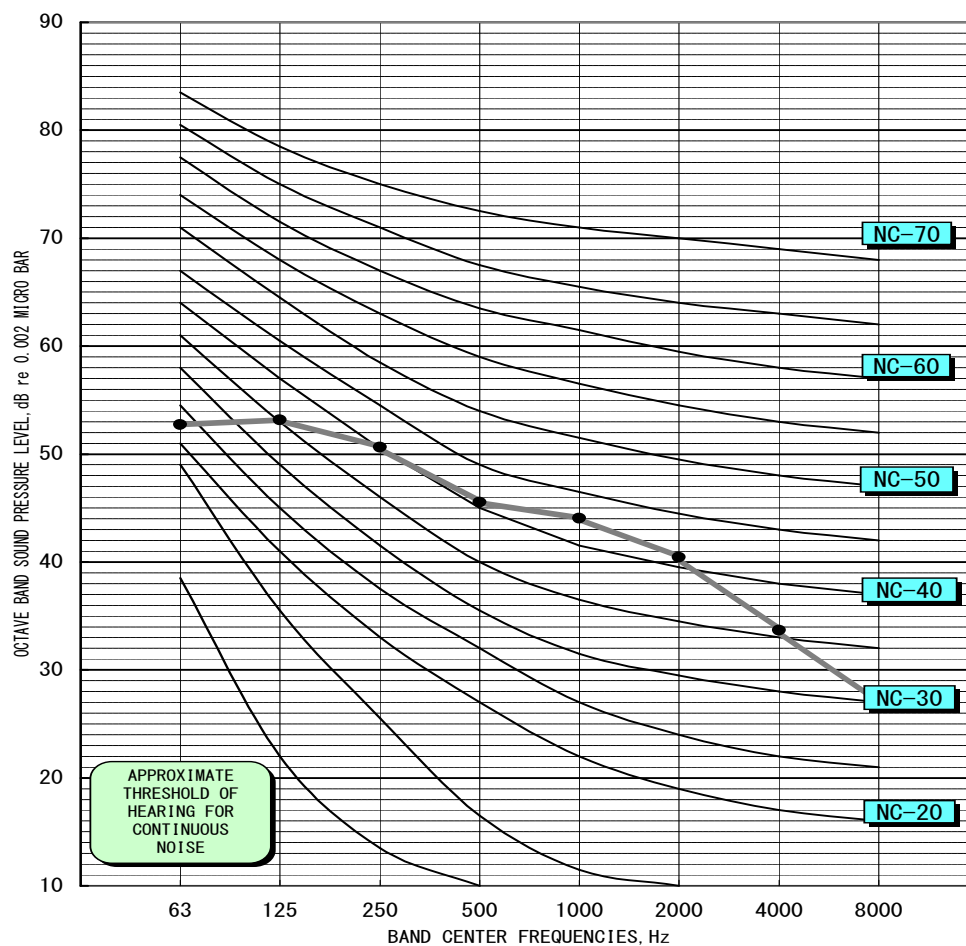
MUY-GE12NA



NOTCH	SPL (dB (A))	LINE
COOL	49	●—●
HEAT	—	□---□

Test conditions are based on JIS Z8731

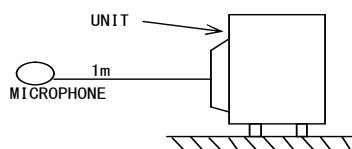
Ambient temperature Cooling DB : 35°C WB: 24°C
Heating DB : 7°C WB: 6°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

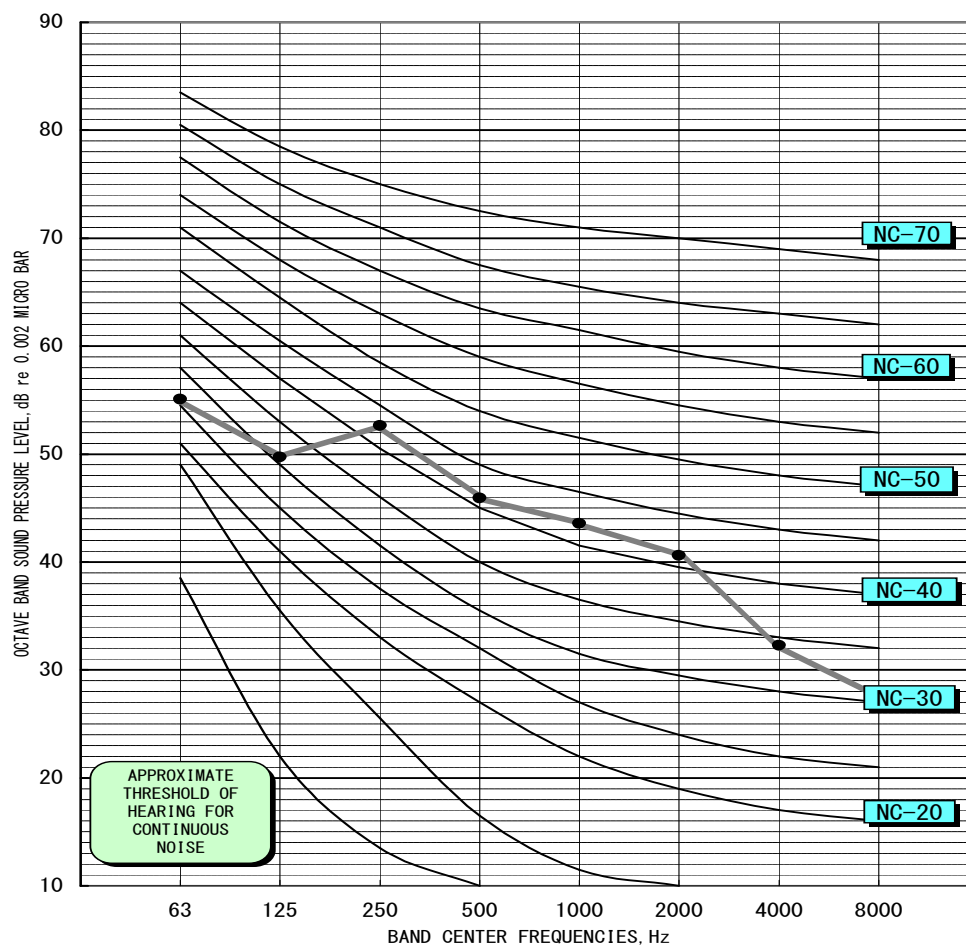
MUY-GE15NA-1



NOTCH	SPL (dB (A))	LINE
COOL	49	●—●
HEAT	—	□---□

Test conditions are based on JIS Z8731

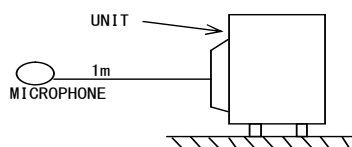
Ambient temperature Cooling DB : 35°C WB: 24°C
Heating DB : 7°C WB: 6°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

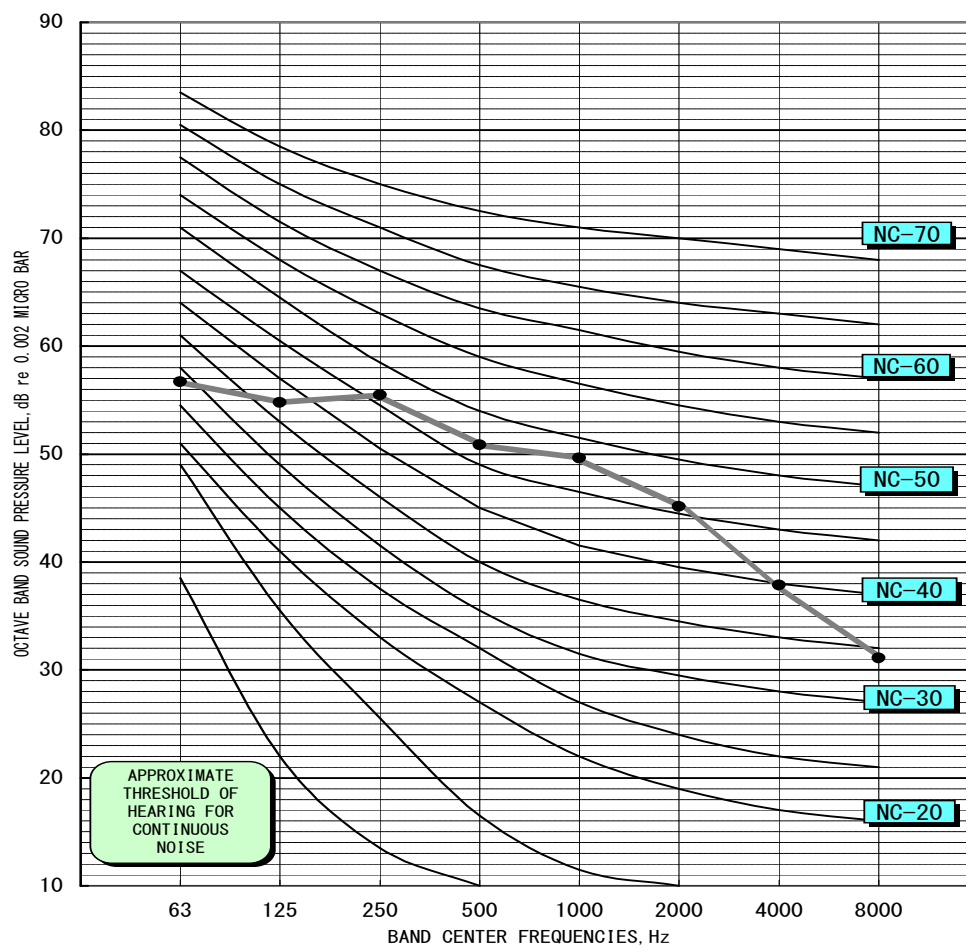
MUY-GE18NA-1



NOTCH	SPL (dB (A))	LINE
COOL	54	●—●
HEAT	—	□---□

Test conditions are based on JIS Z8731

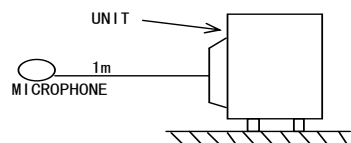
Ambient temperature Cooling DB : 35°C WB: 24°C
Heating DB : 7°C WB: 6°C



Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

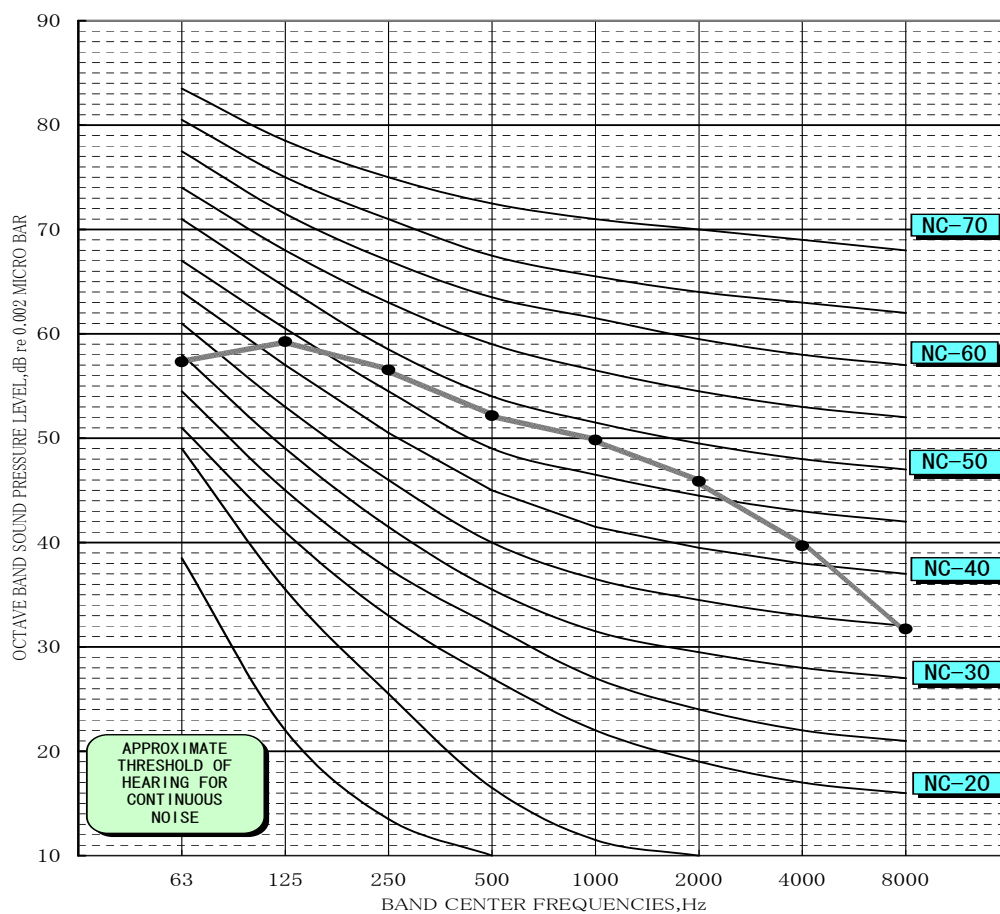
MUY-GE24NA



NOTCH	SPL (dB(A))	LINE
COOL	55	●—●
HEAT	—	□---□

Test conditions are based on JIS Z8731

Ambient temperature Cooling DB: 35°C WB: 24°C
Heating DB: 7°C WB: 6°C



Due to continuing improvement, above specification may be subject to change without notice.

3-13. STANDARD OPERATION RANGE

(1) INDOOR UNIT

MSY-GE09NA-8 MSY-GE12NA-8 MSY-GE15NA-8 MSY-GE18NA-8 MSY-GE24NA

Operating Range

		Indoor intake air temperature	Outdoor intake air temperature
Cooling	Maximum	95° FDB, 71° FWB	115° FDB
	Minimum	67° FDB, 57° FWB	67° FDB

(2) OUTDOOR UNIT

MUY-GE09NA MUY-GE12NA MUY-GE15NA-1 MUY-GE18NA-1 MUY-GE24NA

OPERATING RANGE

(A) POWER SUPPLY

	Rated voltage	Guaranteed Voltage (V)
Outdoor unit	208/230 V 1 phase 60 Hz	Min.187 208 230 Max.253 ----- ----- ----- ----- -----

(B) OPERATION

Mode	Condition	Intake air temperature (°F)			
		Indoor		Outdoor	
		DB	WB	DB	WB
Cooling	Standard temperature	80	67	95	—
	Maximum temperature	90	73	115	—
	Minimum temperature	67	57	14	—
	Maximum humidity	78%		—	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) INDOOR UNIT

Part Number	Descriptions	Applicable model
C13-103	Blue Diamond Sensor Extension Cable - 15 Ft.	All Models
CWMB1	Drain Pan Level Sensor/Control for indoor unit shut off to prevent Drain Pan Overflow	
DPLS1	Portable Central Controller (PCC) - controls up to 16 RedLINK Zones - requires an MHK1 on each indoor unit	
DSD-400P	Wireless wall-mounted remote controller (MRCH1) with a signal receiver (MIFH1) and cable (MRC1) all in one kit	
MAC-2310FT-E	Anti-Allergy Enzyme Filter (qty of 2)	GE24
MAC-308FT-E	Platinum Catalyst Deodorizing Filter	GE06,09,12,15,18
MAC-333IF-E	System Control Interface - MA, Contact terminal, and M-NET Control Adapter, Supplemental heat and humidifier adaptor	All Models
MAC-408FT-E	Anti-Allergy Enzyme Filter (qty of 2)	GE06,09,12,15,18
MCCH1	Outdoor Air Sensor - reads both outside temperature and humidity displayed on MRCH1 and MCCH1 if installed	All Models
MHK1	Multi-functional hard wired controller (used specifically for twinning, lead/lag, and 7 day programmable applications) Requires MAC-333IF-E Adaptor	
MOS1	Lockdown Bracket for wireless, hand-held, remote controllers	
PAC-YT53CRAU	3-Pole Disconnect Switch 30 Amps 600 volts rated for interrupting power supply at/near indoor unit - fits 2 X 4 utility box	
PAR-21MAAU	4 piece (1 pair) condensing unit wall mounting brackets - painted steel	
RCMKP1CB	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) INDOOR UNIT (cont.)

Part Number	Descriptions		Applicable model
SI30-115	Mini-Condensation pump - 115 volt application		All Models
SI30-230	Mini-Condensation pump - 230 volt application		
TAZ-MS303	Advanced Blue Diamond Mini-Condensation pump w/ Reservoir & Sensor - 208/230 volt application		
X87-721	Simple MA Remote Controller (requires MAC-333IF-E interface for MSY/Z and MFZ indoor units)		
MLS143812T-15		1/4 x 3/8 x 15' / 1/2" Twin-Tube Insulation	GE09,12
MLS143812T-30		1/4 x 3/8 x 30' / 1/2" Twin-Tube Insulation	
MLS143812T-50		1/4 x 3/8 x 50' / 1/2" Twin-Tube Insulation	
MLS143812T-65		1/4 x 3/8 x 65' / 1/2" Twin-Tube Insulation	
MLS141212T-15	Diamondback Linesets	1/4 x 1/2 x 15' / 1/2" Twin-Tube Insulation	GE15,18
MLS141212T-30		1/4 x 1/2 x 30' / 1/2" Twin-Tube Insulation	
MLS141212T-50		1/4 x 1/2 x 50' / 1/2" Twin-Tube Insulation	
MLS141212T-65		1/4 x 1/2 x 65' / 1/2" Twin-Tube Insulation	
MLS141212T-100		1/4 x 1/2 x 100' / 1/2" Twin-Tube Insulation	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) INDOOR UNIT (cont.)

Part Number	Descriptions		Applicable model
MPLS385812T-10	Diamondback Linesets	3/8 x 5/8 x 10' / 1/2" Twin-Tube Insulation	GE24
MPLS385812T-15		3/8 x 5/8 x 15' / 1/2" Twin-Tube Insulation	
MPLS385812T-30		3/8 x 5/8 x 30' / 1/2" Twin-Tube Insulation	
MPLS385812T-50		3/8 x 5/8 x 50' / 1/2" Twin-Tube Insulation	
MPLS385812T-65		3/8 x 5/8 x 65' / 1/2" Twin-Tube Insulation	
MPLS385812T-100		3/8 x 5/8 x 100' / 1/2" Twin-Tube Insulation	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(2) OUTDOOR UNIT

Part Number	Descriptions	Applicable model
CWMB1	4 piece (1 pair) condensing unit wall mounting brackets - painted steel	All Models
DSD-400P	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	
ULTRILITE1	Condensing Unit Mounting Pad 16" x 36" x 3"	
MAC-886SG-E	Outdoor air outlet guide for directing discharge air away from other outdoor unit	GE24
MAC-889SG	Outdoor air outlet guide for directing discharge air away from other outdoor unit	GE09,12,15,18,24

Due to continuing improvement, above specification may be subject to change without notice.